

## THE SCHOOL REVIEW

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### THE SUPERVISION OF PRIVATE SCHOOLS BY THE STATE OR MUNICIPAL AUTHORITY.\*

In our zeal for the advancement of Public School Education, it is to be feared that we have ignored two facts: first, that in increasingly large numbers everywhere save in New England, our more prosperous citizens have been sending their children not to the national schools, but to schools and academies essentially private; and second, that up to this hour no organized movement has been made looking to the systematizing and supervising of these private and endowed schools, in which some 2,000,000 American boys and girls are being educated. Change but a word here and there, and what Horace Mann said of public school education fifty years ago, is true of a large part of American education to day: "These schools are so many distinct, independent communities, each being governed by its own habits, traditions, and local customs. There is no common superintending power over them; there is no bond of brotherhood or family between them. The teachers are, as it were, embedded each in his own district and they are yet to be excavated and brought together, and to be established, each as a polished pillar of a holy temple. As the system is now administered, if any improvement in principles or modes of teaching is discovered by talent or accident, in one school, instead of being published to the world it dies with the discoverer. No means exist for multiplying new truths, or even for preserving old ones." And that Chorepheus of our ed-

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\* The term, "Private Schools" as used in this paper, includes all schools not under the State control; *i. e.*, endowed and preparatory schools. Read at the International Congress of Secondary Education, Chicago, July 26.

ucational reform goes on to ask : " Do we not need some new and living institution, some animate organization which shall at least embody and diffuse all that is now known and thereby save every year hundreds of children from being sacrificed to experiments which have been a hundred times exploded ? " We ask further : Must each generation of secondary school masters, laying no tribute upon capitalized experience, begin its fortunes anew and exhaust all possible errors before arriving at the soundest principles of school work ? Happily America is the last of the highly civilized nations to give attention to this large department of the teaching work. Our friends here from Germany, France, Russia and Sweden, will tell us what state supervision has done for higher education in each of these countries, and representatives of the British schools will, from the mixed practice in vogue in the United Kingdom, further irradiate the subject from their point of view.

To simplify our subject, nothing will be said in this paper of the strange and hurtful isolation of the private schools and academies from the public high schools—two classes of schools that should in the necessities of the case have very much in common. They are both doing collegiate preparatory work, and pupils are constantly, in all parts of our land, being transferred from one to the other and usually with considerable embarrassment to both pupils and teachers.

Looking at the question before us in its entirety, it concerns primarily 250,000 pupils in our public high schools, and 200,000 in private schools of secondary grade. Our brief, then, is in the interests of nearly a half million boys and girls, many of whom are to swell the 100,000 enrolment of the five hundred American colleges ! Surely this is a leading question in the education of the day ! By necessary consequence, by unescapable implication, we are face to face with some of the deeper questions of education, such as the age of admission, the contents of a course of secondary instruction, and the professional training of teachers.

But some one will say, directly, you suggest supervision of what has been deemed private business. " This is a Republic. Long ago we burst the bonds of a meddlesome paternalism. Intelligent individualism is now the regulative principle, and we will not return to any of the forms of despotism. " But this is hasty speech and ignores the many forms in which we voluntarily submit to

authority in every relation of the citizen life. If republican institutions "do wake to life unexampled energies in the whole mass of the people and bestow upon the people unexampled power to work out their will," these same institutions should induce the highest self-control and guidance. It were a strange folly to add to the impulsive forces of a people without also adding to their regulating forces. If it be indeed true that the next generation shall contain a larger percentage of men and women graduated from our higher institutions, men who in the nature of the case shall exert mighty influence in the affairs of the nation, it ill befits us to bandy words about private rights in a business that conditions so profoundly the welfare of the state. We create and maintain a national congress convening annually at incredible expense, to regulate the tariff, internal improvements, and currency; we have state legislatures to legislate about every conceivable subject; we have courts, sitting and moving, to adjudicate upon the rights of person and property of every degree of importance, and yet here is a large section, in some respects the most important section of education, which had received literally nothing thus far in the way of organization and united effort.

We grant freely the high character, skill and devotion of many worthy private school teachers and proprietors, but it is straining unduly our poor human nature to ask it to work as well without as with direction, supervision and accountability. Nor does it meet the objection to say that these private schools are under the supervision of parents, trustees, and the public. I know of a prominent private fitting school whose entire graduating class of some twenty-five members recently failed to secure a sufficient number of credits to admit it to one of our lower grade colleges. This stunning disappointment was the first information parents or public had of the inferior instruction being given. The half-dozen larger academies of the country receiving pupils from every state in the Union know the deplorable standards that are tolerated all too generally in our private day and boarding schools. Unquestionably, some of these unsupervised schools are superior to the very best of our public schools, and yet I heard a member of the committee appointed by Harvard College to examine one of our most famous academies, say that if the report of his committee were to be published it would make a great stir in the school world.

It is passing strange that, though you will not commit the care of your body to an unlicensed physician, the care of your property to an unlicensed attorney, nor the care of your soul to an unlicensed clergyman, yet you send your son and daughter, not merely for five or six hours a day, but for months and years to a school-master whose best qualification may be only that he has mastered the art of advertising. With the exception of Great Britain, I believe, we are the only enlightened nation that commits such folly. Elsewhere the teacher—man or woman—must pass a prescribed examination, and thereafter his or her school must submit to some form of supervision and control.

For a moment let us dwell upon a statement which may be made without fear of successful contradiction. It is this: *Supervised education has always and everywhere proved good education; education without such supervision has always proved inferior.* I shall not detain you with the historic proofs of this proposition, but many of you will recall the first movements by the Jesuits for better schools—a body of teachers whose glaring faults in some particulars are readily admitted, and yet no less an authority than Robert Herbert Quick says: "No other school system has been built up by the united efforts of so many astute intellects; no other has met with so great success, or attained such widespread influence. No body of men since the revival of learning has played so prominent a part in education. Their skill and capacity are attested by such high authorities as Bacon and Descartes. For more than one hundred years nearly all the prominent men throughout Christendom—both among laity and clergy—received the Jesuit training and for life regarded their old masters with reverence and affection." Now the central excellence of this Jesuit training was in the word, "system." The famous commission of 1584 formed a closely articulated and minutely supervised system of education, extending over the period of our own secondary courses. It could also be shown that the patronage and supervision of education under the Caliphs of Bagdad and Cordova contributed in no small measure to the remarkable success of the Mohammedan Schools that flourished with such signal efficiency for five centuries. In the Schools of Bagdad, Damascus, Cordova, Salamanca, and Toledo, Grammar, Chemistry, Algebra, Trigonometry and Astronomy, were made to assume new forms and made very great advances.

Coming to more recent times, the history of education in France and Germany is largely the history of organized, systematized, supervised work. The French Convention of 1793 prepared the way for the ample reforms and systems inaugurated thirteen years later by Napoleon, and it is worthy of note that the best impulses of reform in the French Schools started from the Lycées or Secondary Schools. I need not dwell on the fundamental characteristics of the German Schools. Suffice it to say that we would almost accept the Army Bill if thereby we could have the German Gymnasias in our own land, or at least the capacity and efficiency of these schools. Before completing our hurried glance at organized education, reflect for a moment upon the condition of the English Schools. Here so much has been left to individual effort and denominational zeal that the historian must record the verdict, that education has made less progress in England than in any other European State. Her theory and practice closely resemble our own. In our country, may I not with all prudence say, that our public school system, taken in its entirety, explain the fact as we may, is superior at every point to our haphazard, unsystematized private schools. This is not due as often charged to the inability of some private school pupils to meet the demands of the public schools, for the vast majority of our private school pupils have at no time been connected with public schools. It has ceased to be a question in thousands of American homes whether or no the children shall attend the public schools. They are foreordained to the all too tender mercies of the "select school."

If what I have been trying to say be admitted, it is idle to deprecate supervised schools because of the sure taint of politics. The genius and earnestness of our people may be trusted to stay the hand of this malign influence in the affairs of our schools. Enlarged responsibilities, including the care of the schools patronized by classes of citizens likely to be more exacting and more influential, would indeed induce a higher sense of duty and less meddlesome methods on the part of the custodians of our schools. It is quite germane to our subject, as it seems to me, to call attention to that other form of governmental control of our schools exemplified in the national academies at West Point and Annapolis. The Director of the English Military School at Woolwich volunteered to me the statement that these two American schools

were the best schools in the world. This I believe to be true as regards all matters of organization and method. Horace Mann's predictions have not been fulfilled. A way was found to supervise these national schools that made it possible to secure princely teachers and to produce the highest educational results yet attained in the scholastic world. And the hour is at hand when the vast interests of our collegiate education as represented primarily in our private schools can no longer be left to unaccredited, unsupervised masters and schools. The foreign nations that are copying our system of public school education must be saved the present palpable defects in our unsystematized private schools. Of course with the open-minded members of the private school teaching force, there would be every form of hospitality to a proper board of supervision. In each state a number of schools would have nothing to fear and much to gain by this public accrediting of their work. A long stride forward would be made in the work of professionalizing the teaching office, and as one result, publishers, insurance companies, and general trade would find it more difficult to lure teachers from their chosen career. And another result of such a recognition of our work would be the higher value and the greater permanency attaching to it. What anybody is able to do is not worth as much as that which only a limited number is able or permitted to do. There are now too many registered teachers at our agencies. There should be no employment bureaus except for servants. Imagine a "Lawyers' Agency," "a Physicians' Bureau," or a "Ministers' Employment Club."

I am well aware that laws cannot save us from any of the evils that may threaten. But with us—let us remember for our comfort—the very idea of legislation is reversed. Once, the law prescribed the action and shaped the wills of the multitude; with us the multitude prescribe and shape the law. Legislators study the will of the people as philosophers study a volcano—not with any idea of doing aught to the volcano, but to see what the volcano is about to do to them. Therefore it is that we have no longer the dread of the olden time of law makers, and we are the more willing to reduce to operative and efficient forms the people's will. Let us not hesitate to do this in the matter before us. An able lawyer of national reputation, thinks that ample authority to make laws regulating education of all kinds is given by the Con-

stitutional clause, reading, "Congress has power to lay and collect taxes . . . and provide for the common defense and *general welfare of the United States*." But this supreme work of education is left to the several states, and to them the appeal for proper regulation of the secondary schools must be made. If I cannot sell sour bread or hawk decayed fish without the interference of the board of health, why should I fear the "paternalism" in government, state or municipal, that bars me from giving an inferior quality of instruction?

I do not care here to consider at length the ways by which this regulation should be achieved. It would be amazing if our people, in view of the manifold forms by which we now safely lay tribute upon national, state, and municipal authority, could not devise some amicable and effective arrangement, derived, if need be, from the fish-market, the present school-board and the board of Control of the West Point and Annapolis schools. I would not have the system of supervision by which our public schools are governed. Nor would I care to see another Board of Regents such as directs public education in New York, excellent as that system may be in some respects. There is at least one illustration of what might be done to justify the proposition of this paper. I venture to give it at some length, as set forth by William Allen Butler, Esq., in his plea before the legislature of New York.

"In 1763 the Colonial legislature passed an act which organized the Board of Wardens for the port of New York, and gave them power to license pilots, making it compulsory on masters of vessels to accept their services or pay half pilotage. Gradually a vicious element crept into the system. The Board of Wardens, appointed by the party in power in the state government, became infected by the virus of politics, which communicated its bad influence to the pilots. The older pilots shirked their duty, and in the winter storms, instead of braving the dangers of the coast, toasted their toes in comfortable quarters, while incoming emigrant vessels were signaling in vain for their aid.

"The pilotage system became an intolerable monopoly. The Chamber of Commerce of New York, and the whole shipping interest, petitioned the legislature against it. The licensed pilots opposed the repeal or alteration of the law; and in reply to a call from the legislature, the Port Wardens reported that "*officially*" they knew of no existing evils. The legislature rose without act-

ing on the subject, but a terrible lesson was in reserve. On Sunday morning, the 27th of November, 1836, at nine o'clock, the passenger ship *Bristol* lay at the entrance to the port, "*with the usual signal flying for a New York Pilot, but as none came out, she remained in the offing until about four o'clock, half an hour before night fell in, when she struck upon Rockaway Beach and was lost.* On Sunday morning, January 1st, 1837, the barque *Mexico*, another passenger vessel, lay off the bar, with about thirty other square-rigged vessels, all having signals flying for pilots. The *Mexico* continued standing off and on till midnight, and at night the whole fleet of ships displayed lanterns from their yards for pilots; *still no pilot came*, and she was wrecked during the night.

"A fearful number of lives were lost by each of these disasters. On the ill-fated *Mexico* 104 passengers, two-thirds of their number being women and children, were frozen to death.

"A thrill of horror was caused by this awful sacrifice of life. Governor Marcy, in his annual message, three days subsequent to the loss of the *Mexico*, invited the attention of the legislature to the subject of the pilotage system.

"The legislature failed to act till 1845, when in response to remonstrances and appeals, all pilotage laws then in existence in the state were abolished and congress was petitioned by the state to make national laws to regulate all pilotage. Failing in this direction in 1846, the merchants and underwriters of New York, under the pressure of loss of life and money, by voluntary coöperation organized a Board of Commissioners of Pilots, composed of five members, two of whom were elected by the Chamber of Commerce and two by the Board of Underwriters, and one appointed by the Secretary of the Navy; whose duty it was "to examine and issue certificates to as many persons to act as pilots for the port of New York as they may deem the navigation of the port requires." This purely voluntary board gradually built up an efficient pilotage service whose benefits every transatlantic traveller still enjoys. And now follows the instructive paragraph in this incident in the legal history of New York:

"In 1853, when it was proposed to deal with the subject by legislation, the Chamber of Commerce and the leading marine underwriters dreaded a return to the old monopoly, and remonstrated against any legislative interference. But when the Legislature's bill was matured and when in June, 1854, the act was

passed, in one of those lucid intervals that come even to politicians and state legislators, it *adopted the system devised by the merchants and underwriters and created a board of five commissioners to be elected, three by the Chamber of Commerce and two by the Board of Underwriters, identical with the then existing board, save as to a representative of the Navy Department. The commissioners of the voluntary board were at once elected as members of the State Board, and every one of them served in it until the day of his death.*

"In this way, by adopting and legalizing the action of the merchants and underwriters, the Legislature of 1853 well and wisely divorced the Sandy Hook pilotage service from politics and partisanship, and delegated to the two commercial bodies in the great metropolis best qualified for the trust the selection of the State officers who should administer the system. The compulsory features of the law excited opposition, and it was denounced unconstitutional by reason of the method it provided for the election of the Commissioners, *but the Court of Appeals held that it was a valid and constitutional act.*"

I have dwelt at length upon this pilotage system of New York, because I believe it shows clearly a safe and efficient solution of precisely such a problem as we have before us, and because it illustrates once more our American ingenuity in making the government our servant rather than in appointing it as our master. A commission of six members in each state could be named by the two or three leading colleges or universities. This commission could be legally approved by the Legislature to pass upon the qualifications of all teachers in our private schools, and to examine these schools at stated times as is the practice in France. Such visitation by college professors and distinguished citizens would be primarily friendly, having in view the welfare of the schools and pupils. Worthy teachers would welcome such an interest and the consequent coöperation of judicious educators. Each state would create its own standard of excellence in the teaching body and in the results to be attained, having regard to the conditions of education in its own locality.

*James C. Mackenzie.*

*Lawrenceville School.*

## HOW TEACHERS ARE TRAINED IN THE PROVINCE OF ONTARIO, CANADA.

Before a candidate for a teacher's certificate can be admitted to a training school of any grade in the Province of Ontario, he must have passed what is called the non-professional or academical examination prescribed by the Education Department. This examination varies with the grade of certificate for which the candidate is an applicant. The papers on which the examination is based are prepared by a committee of experienced teachers who have no interest in the candidates. They are dispatched from the chief offices of the department under seal to the Public School Inspectors of the Province or others appointed by the Department to preside at the examination and submitted to the candidates under very stringent regulations as to copying, prompting, etc. The answers are returned under seal to the Department and then submitted to a committee of experienced teachers. This committee is appointed by the department from persons actually engaged in teaching, who hold either a degree from a provincial University or the highest class of certificate obtainable by a public school teacher. Although the examination is conducted by the Department of Education it is practically an examination of candidates for the teaching profession by members of the profession of the highest standing and the widest experience.

In order to guard against even a suspicion that a teacher, who may be an examiner of his own pupil, should abuse his trust, a number is assigned to each candidate at the time of his examination and this number, (not the candidate's name) appears on the examination papers. Any candidate who takes any means of making himself known to an examiner is disqualified, and the Department has the power of canceling the certificate of any examiner who has been known to dishonestly advance the interests of any candidate. In the same way the inspectors or other persons who preside at the examination and give out the papers are liable to lose their standing if convicted of improper practices. When the papers are read, the examiners report the results to the Minister of Education, and on their report non-professional certificates of three grades are issued, viz: primary, junior and senior, these

being the academical basis of third, second and first class certificates afterwards issued when the training school course is completed.

Training schools are of three grades corresponding to the three classes of academical certificates, viz: County Model Schools, Normal Schools and the Provincial School of Pedagogy.\*

#### COUNTY MODEL SCHOOLS.

County Model Schools for the training of third-class teachers are established by the Education Department on the recommendation of a board of examiners in each inspectorial division. They now number sixty-one. The school usually selected for this purpose is the largest public school most conveniently situated in the district. In some counties there is one Model School, in the larger counties there may be two or even three. The plan assumes that there should be a County Model School in every district containing a hundred public schools. No Model School, however, can be recognized by the Education Department as suitable for the purpose of training third-class teachers unless:—

(1). The Principal holds a first-class provincial certificate and has had at least three years' experience as a public school teacher.

(2). Unless the school is provided with three assistants each holding at least a second-class provincial certificate.

(3). Unless the school is properly equipped with maps, globes, blackboards and other necessary equipments of a first-class school.

(4). Unless a room exclusively for the use of the teachers in training is provided in addition to the accommodation required for ordinary public school purposes.

(5). Unless the Principal of the school is relieved of all public school duties, except management, during the Model School term.

The number of teachers in training at each school rarely exceeds twenty-five; the average last year was nearer twenty. A fee of five dollars is exacted of every candidate as an examination fee. The course begins on the 1st of September and closes at the Christmas vacation. No candidate is admitted who will not be eighteen years of age before the close of the Model School term.

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\* There is a training course for Kindergarten teachers, extending over two years, but an account of it is omitted for want of space.

During the term the Principal of the school delivers a course of lectures on school organization and management based on "Baldwin's Art of School Management," and also explains to the teachers in training the best methods of instruction to be adopted with respect to all subjects taught in the first four Forms of the public school. With the aid of his assistants he illustrates in the various class rooms of the school the best methods of teaching these subjects. When the teachers in training have been in attendance four or five weeks they are permitted to teach small classes in the presence of the Principal. These test lessons are made the basis of criticism and discussion by the Principal and the other members of the training class and thus, partly by lectures, partly by illustrative lessons and partly by practical teaching for a period of four months the young teacher is initiated into the mysteries of the profession which he proposes to enter.

Although it is assumed that the teachers in training have completed their academical course before entering the County Model School, the Principal is not debarred from submitting such tests of scholarship in the various subjects of the school programme as he may consider necessary for training purposes. Without adequate knowledge of the subject in hand, there could be no efficient teaching. The Model School course is, therefore, to a certain extent, a review of the academical course for the purpose of presenting the knowledge which that course supplied logically to an ordinary class of pupils.

Besides the course of instruction above referred to, teachers in training receive lectures on hygiene with special relation to temperance and the sanitation of school-rooms. Their attention is also called to the school law and regulations, so far as they relate to teachers and pupils. Special instruction is given in Music, Drill and Calisthenics.

At the close of the term an examination is held by a board of examiners composed of the inspectors for the county and two other teachers holding first-class certificates of qualification. This examination is conducted on papers prepared under the authority of the Education Department. In estimating the standing of candidates at the final examination, the examiners are governed by three considerations:

- (1) The report of the Principal of the County Model School on the work of each candidate during the term.

(2) The attainments of each candidate with respect to his knowledge of school organization and methods of instruction based upon the written examination on papers above referred to.

(3) His ability to teach by a practical test with a class of pupils in the presence of the examiners.

The candidates who pass the examination are reported to the Education Department, and are then awarded third class certificates. These certificates authorize them to teach in any part of the province for a period of three years.

Each County Model School receives a grant from the Education Department of \$150.00 a year, and an equal sum from the treasurer of the county in which it is situated.

It may be said that the course of training for such a brief period as four months is of comparatively little value. Experience has shown, however, that this is not the case. Those who attend the training course at the County Model School are face to face with the fact that they are just entering upon a professional career. They are brought in contact with a Principal and a staff of well accredited attainments. They are under the eye of the inspector and other school authorities, and being relieved from the drudgery of academical work, their minds are free to receive a new form of instruction which they now feel to be indispensable to their future professional success. The frivolity of the student is exchanged for the calmness and dignity of the teacher. They feel they are no longer boys and girls, but men and women, about to assume all the responsibilities of active life, and although it is not assumed that the County Model School does all in the way of training that could be desired, an experience of seventeen years in Ontario has shown that as a means of rejecting persons at the very threshold of a profession who are evidently not adapted to be teachers, and as a means of directing the attention of the young teacher to the elements of didactics and giving him a professional inspiration at the beginning of his career, no better system has yet been found. Until boards of trustees are prepared to pay larger salaries than they now pay there must be some relation between the demands made upon the teacher on entering the profession and the remuneration which he afterwards receives. At all events it is the settled educational opinion of the Province of Ontario that the teacher trained in the County Model School is far in advance of his predecessor who entered upon his duties fresh from the school room without such preliminary training.

## NORMAL SCHOOLS.

The Normal Schools of Ontario are two in number, and were originally established with a view to give academical as well as professional training. They are now confined exclusively to the training of teachers who are candidates for second-class certificates. They are under the control of the Education Department, and are manned with a competent staff of teachers holding first-class certificates of qualification. Each has a practice school, or model school, with from three to four hundred pupils.

The Normal School term for the training of pupils consists of about five months. Candidates are admitted only upon evidence that they have taught successfully at least one year and that they are the holders of the necessary academical certificate of qualification. Before being enrolled they are, however, required to pass a preliminary examination upon the first seven lectures of "Hopkin's Outline Study of Man," the first sixteen chapters of "Quick's Educational Reformers," and the first five lectures of "Fitch on Teaching." The object of this preliminary examination is to induce habits of thoughtful reading on the part of those who aspire to the rank of second-class teachers. Should it appear that they have not read this course they are refused admission.

The course of professional training is of a higher grade although on the same lines as the course in the County Model School, with the addition of lectures in psychology and the study of the most modern authorities in methods of instruction and professional literature generally. They are subjected to similar tests on the theory of education and in practical teaching, and their final examination is conducted by the Education Department through examiners appointed by the Minister of Education, these examiners being usually public school inspectors. Their standing depends upon the report of the principal and his staff, their knowledge of the theory and history of education and a practical test of actual teaching in the presence of the examiners in the practice school. In the case of those who pass this examination satisfactorily a second class certificate is awarded. This certificate is valid during good behavior and the only fee chargeable is an examination fee of \$5.

The provincial normal schools of Ontario are in no sense differ-

ent from the ordinary normal school of the United States, except that in Ontario the whole course is purely professional. A longer course would no doubt be better. It is felt on all hands that the time is too short for the proper assimilation of the many lectures which the principal and his staff are required to give, and particularly for giving that careful consideration to the development of lessons in the practice school so necessary to success. At an early day it is hoped that the normal school course may be extended to one year and be still maintained as at present on purely professional lines.

#### THE ONTARIO SCHOOL OF PEDAGOGY.

When the academic work of the normal schools was abolished the education department had to look to the high schools of the province for the education of the teachers of the public schools, now numbering over 8,000. In order that this work might be well done, and that the future teachers of the public schools might form correct habits of study, it was necessary to provide for the training of their teachers. Provision had already been made for the training of second and third class teachers, but as yet no provision had been made for the adequate training of first class teachers or for the training of the teaching staff of the high schools. To meet this want the Ontario School of Pedagogy was established.

The qualifications for admission to this school are, (1), either a degree from a university in Canada or some other part of the British possessions, or (2), the standing of an undergraduate in Arts of the 3rd year in the Provincial University or its equivalent in any other university, or (3), the non-professional standing required of the first class public school teachers. In addition to this, candidates must have completed their 21st year before or during the term. In the case of candidates who pass successfully the required examination at the close of the term, an interim certificate is awarded qualifying them to teach as an assistant in a high school for six months. If on examination at the end of that time it is found they have taught to the satisfaction of the Education Department, they are then allowed a permanent certificate as an assistant high school teacher. Those holding a degree in Arts, after serving satisfactorily as an assistant for two years are allowed the standing of principal.

The School of Pedagogy is located in Toronto, the capital of the Province. Hitherto there have been two courses in the year ; it is now proposed to make the course a full year. The school is conducted under the regulation of the Education Department. Its principal, who is a lecturer in psychology, receives a salary of \$3,000. His staff consists of lecturers in school organization, the best methods of teaching the classical and modern languages, mathematics and science, English and physics. For those who desire to fit themselves specially for teaching commercial classes a course of instruction in penmanship and stenography is prescribed. Lectures are also given in physiology and sanitary science and practice in music, drill and calisthenics.

And here it might be observed, as in the case of the other schools, there is a gradation of the professional work from what was quite elementary in the model school to what is sufficiently advanced to be adapted to the attainments and capacities of University graduates of three years' standing in the School of Pedagogy.

At the close of the term an examination is conducted, as in the case of the other training schools, on papers prepared by experienced teachers under the authority of the Education Department, and on the result of this examination, together with the report of the principal and his staff, the certificate desired is given or refused. It has already happened on many occasions that a graduate of a University is found unable to attain to the professional standard required by the Education Department.

The certificate awarded is, like the certificate granted in similar cases in the German *Seminar*, merely an interim certificate. It is not until the holder of such certificate has taught six months to the satisfaction of the Department that he obtains a permanent license. The School of Pedagogy is sustained entirely out of provincial funds. Candidates, however, pay an examination fee of \$10.

The preceding sketch of the training schools of the Province of Ontario shows the effort that has been made to work out a comprehensive system of professional training in conjunction with the state aided system of education. By means of existing public schools, and with a grant in all of less than \$20,000 over 1,000 teachers of the lowest grade, unfortunately the majority both in Canada and the United States, receive a reasonably thorough drill in the elements of pedagogics.

The next grade having been educated academically in the high schools, and having passed through the county model school and having, moreover obtained a year's actual experience in teaching go to a normal school. These number annually, about 400. Then comes the class who have a university education ; many of these had been previously trained at a county model school and a normal school, but they have still to run the gauntlet of the School of Pedagogy. These number over 100 annually.

The professional imprimatur is essential for all irrespective of their literary attainments. It may, therefore, be safely assumed:—

(1) That the settled policy of the educational authorities is that every teacher engaged in any class of schools receiving public aid, must submit to professional training.

(2) That mere academic attainments are not considered sufficient qualifications for the teaching profession.

(3) That the true examiner of the teacher is the man who has had professional experience as a teacher himself.

(4) That to secure necessary uniformity in standards and an economic gradation of certificates and examinations a reasonable amount of centralization is necessary.

(5) That the separation of the academical and professional training of teachers is possible, without injury to either course of study.

*Geo. W. Ross.*

*Minister of Education, Province of Ontario, Canada.*

## ON SOME ASPECTS OF PREPARATORY WORK IN LATIN.\*

The object of this address is not to bring a railing accusation against the prevailing methods of instruction in preparatory work in Latin, nor to advance new and startling theories in any direction, but only to stir up by way of remembrance minds already proved pure. I need not, therefore, set myself at this moment to the establishment of the claim of the ancient classics to a place, and to a prominent place, in our scheme of secondary education. I may simply assert, in such a company as this, without argument and without great danger of challenge or of contradiction, that the means by which man flashes a living thought into the soul of his neighbor is as deserving of earnest attention as the means by which he digests his breakfast; that even to dig after Greek roots is as worthily absorbing a pursuit as to dive with a scalpel into the viscera of a cat; that we may feel as intensely the swelling uplift of soul in tracing the undying character of mighty nations through their own utterances, as in learning to piece out the formulæ of salicylic aldehydes.

But a generation or more ago (possibly even later than that) people used to talk a good deal in a vague way about the 'mental discipline' gained by the study of the classics. As nearly as I have been able to get at the bottom of their notions about the matter, they imagined that if the boy spent a considerable part of his time for a considerable number of years in learning by heart long strings of words that start in alike but end differently, in reciting over and over again such meaningless formulas as 'ad-ante-con-in-inter-ob-post-prae-pro-sub-and-super-in-composition-govern-the-dative,' and in burdening his memory with the single English words standing after single Latin words in a dictionary, all to the end that he might be able to substitute orally English of more or less dubious excellence for Latin of undoubted excellence,—they seem to have imagined that if he did all this, he would thereby attain a degree of mental culture and spiritual enlightenment that could come in no other

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way. Their simple faith reminds one of that of our forefathers who said pious charms to cure the toothache, or of the man I met the other day who carries a horse-chestnut around in his pocket, not because he really believes, as his grandmother did, that it will ward off rheumatism, but because he thinks it well to be on the safe side. If the poor boy really gained 'culture' by that method, it is because the human mind, like the human stomach, can stand a great deal of abuse. There are other studies better fitted than the classics to train simply the memory—geometry is often taught, I believe, as though it were supposed to have that for its field,—there are other studies better fitted to train the faculty of demonstrative reasoning. What the study of Latin does in these directions it must do incidentally. What it can do directly is to train the mind in the ability to deal with the 'argument from probability ;' and in doing this it can quicken general taste and judgment, enlarge and broaden human sympathies by the study of a great and distant civilization, establish the real unity of the human race, and above all, kindle the fire of enthusiasm to impel the boy still further onward in the peculiarly rich and varied field open before him.

Now it may seem that the development of the boy in these directions is peculiarly the work of the college and the university. It is a lamentable fact that according to popular opinion the task in Latin of the preparatory school, or high school teacher, is simply to cram the boy full of certain facts so that he can pass certain examinations for admission to college. The gate to the college is supposed to stand with lowered portcullis and the entire faculty sitting on it, to hold it down against all comers, while the preparatory school teacher equips his boys with culverin and battering-ram to help them force an entrance. Now this is certainly a wrong idea. As a matter of fact there isn't any threatening portcullis at all, and the college faculty is only too glad to welcome inside all comers who are ready and able to avail themselves of the advantages offered. What we need to do, all of us, is to make common cause, to cooperate heartily, to communicate freely the one with the other, to emphasize the solidarity of Latin work, as of other studies, from *a* to *izzard*. 'Knowledge is Power,' our old copy-books used to tell us, and the deeper knowledge, doubtless the fuller power. But that mysterious and yet real something called 'education' or 'culture,' which has thus far eluded the

scalpel and microscope of the physical psychologist, is not a sudden flower. The man of culture does not burst forth into the world full armed. He is neither born nor made. He grows. And if he doesn't begin growing before he gets into college he does not have a fair chance ever to attain the full stature of his manhood. Culture is closely allied to growth, and the noting of an absolute point attained at any given moment is of far less importance than the existence of a healthy and vigorous growth proceeding from the very first moment. The teacher's work, then, is not simply to equip the boy with a modicum of facts *about* Latin. It is to make Latin a part of his life from the days when he first learns that the Romans knew that a star is bright, and a rose red, and a human heart warm. If Rome and Gaul, Cæsar and Cicero, Catiline and Aeneas, do not *live* before his eyes, the greatest possibility of Latin as a chief element in his education, has been thrown away. And unless Latin can be made a vital element of culture before the college course begins, what is its value to those who must pass from the high school or academy directly into business or trade? Do not, then, surrender this grandest possibility of the Latin teacher, nor hand it over to the college instructor, contenting yourselves with an attempt to familiarize the boy with the lifeless machinery of the language. 'This oughtest thou to have done, and not to have left the other undone.'

I have said this much by way of exhortation on what seems to me to be after all the most important element in the preparatory work in Latin. Now that my conscience is clear on this point, I can go on to the more prosy part of my subject.

This mysterious culture, this training of the judgment and the sensibilities by work in one direction so that they will respond immediately to demands in any other direction, cannot be developed merely by old-fashioned grammatical drill, however, necessary that is in its place. It can come only by teaching the boy to live and move and have his being for the time, among the Romans. And he cannot do this by reading about the Latin language. No Chatauqua system of the 'Latin Course in English' can ever help him to think the thoughts of the Romans after them, or to look at the life of that people from any other position than one outside the walls.

The ability of the boy to get 'culture' out of Latin, whether

in college or before he comes to college, depends primarily upon his ability to read the language itself,—I do not say to translate it, but to *read* it. And of course I do not mean by reading the oral or mental reproduction in order of the sounds indicated by the Latin letters, but the comprehension of the thought of the writer. Comprehension must as inevitably precede translation as the bud the flower. And in the case of a boy of average ability and command of his own language, translation will as naturally follow comprehension as the flower the bud. It is impossible to translate a Latin sentence before it is understood. And yet boys have been taught for generations past to attempt the impossible in this respect. And with what success? With what monstrosities of language professedly English does a Freshman class in Latin smite the ears of the long-suffering college tutor every September! The boys come from various schools; they have each his own especial variety of translation-English; but they agree in one particular. They have studied Latin three or four, or half-a-dozen years, and only one or two can *read* it. The rest 'get it out' (as they say) slowly and painfully, with the help of a dictionary, perhaps of a grammar, and tolerably often of a 'horse.' They get it out, indeed, (provided there is only a page or two of it), but it is frightfully misshapen and warped in the process. Language was once defined, I believe, by a skilled diplomatist, as an instrument for the concealment of thought. And such an instrument the Latin language is to the average Freshman, because translation has been to him an end in itself, and not merely, as it should be, an evidence that the end has been attained. He has been taught up to translate, but not to read.

If we are to project our minds into the minds of the Romans and to think their thoughts after them, we must evidently follow some other plan than this. We must aim first at the understanding of the original precisely as we grasp the meaning of a speaker or writer in our own language,—in the order in which the words come and without translation. The words and sentences must present their picture before our mind's eye immediately, and not intermediately. In short, we must, as far as we go, use the language as the Romans used it, and understand it as they understood it. Take a very simple example from the very beginning of Latin work, of the difference between the wrong and the right way. The beginner becomes aware that the Romans called that

object *sella*. How does he arrive at that conclusion? If in the wrong way, by a most portentous syllogistic process in which the dictionary takes a prominent part:—*sella* means *chair*; *chair* means that object; therefore, *sella* means that object;—and in nine cases out of ten from that time forward the Latin word will always suggest to his mind not a chair but the *word* chair. And so he takes two steps where he should take only one, and the second step takes him every time out of Latin, where we want to keep him, and into English. *Sella* ought to suggest to him immediately that thing, and *mulier* that, and *mensa* that, without any intervention of English. And the moment this step is achieved, that moment the first step is taken in the sympathetic perception of other people's minds which is so prominent an element in true culture. We need not wait for fruition till the boy can read complex sentences and grasp abstruse ideas. It begins at once.

I have said that the individual words first taught must present their pictures to the mind without the intervention of English. The case is a little more complex when we pass from single words to sentences, but the principle is the same as that followed nowadays in teaching children to read English. The brief sentences at first employed must not be subjected to fanciful dissection, but must flash their meaning out upon the mind at once, as undivided wholes. Let the work of dissection and analysis come afterward. Half of the battle lies in stimulating the boy's interest and courage, so that he won't stand blankly aghast before sentences of two words when he has had put before him thus far ideas contained in only a single word, nor before a sentence of ten words when the last sentence had only eight in it. When once he has caught the idea, you may rely upon it that he will not be inclined to take the more dull and laborious method of working through the English language, but will go straight to the mark. And the very style of his questions will change. No longer will he ask, "How do you translate *fragosus torrens*?" but, "What sort of a *torrens* is a *fragosus torrens*?" and the teacher will feel that a victory is gained. And what inspiration when he can read to his class, for example, the stirring words of Vergil,—*Haec ubi dicta, cauom conuersa cuspide montem impulit in latus; ac uenti velut agmine facto qua data porta ruunt et terras turbine perflant*, and perceive that the listeners see and hear the

stroke of the spear against the brazen doors, and the tumultuous outburst of the winged giants, and the roar of the billows, and the crash of the oars, and despairing shrieks of the sailors,—and have no thought about how to translate it.

But this sort goeth not forth save by unremitting toil, perseverance, and enthusiasm on the part of the teacher. We can't disguise that fact. Just as there is no royal road to learning, so there is no royal road to teaching. The day is so long past when the teacher, as he was called, could tell the boy to begin 'there' on the printed page and learn to 'there,' and next day could sit behind his desk and simply hear the boy say it off, that we smile at the bare recollection of it. The teacher's work is hard; to use our popular college slang, it's a 'grind'; the lamented Mr. Mantilini would call it a 'demd horrid grind.' But that does not frighten the true teacher, and I need not be afraid to admit here that to teach Latin as it deserves to be taught and ought to be taught *is* better than to teach it as it ought not to be taught. But over against the increased difficulty of teaching it well, set the additional stimulus to the teacher in feeling the alertness of perception and eagerness of comprehension on the part of his class, such as never could be kindled under the old wooden system of instruction. Here is something worth working for,—a toil that brings its own reward with it,—an utter subversion of the traditional dullness of the ordinary, every-day teacher's life.

But, some of you will say (for I hope I am talking to some teachers who are young enough not yet to have become that omniscient day-of-judgment person that we all tend to develop into)—some of you will say, 'I never was taught this way. How can I do all these fine things?' Why, my dear sir, or madam, when you and I get to be *perfect* teachers, the commonwealth won't think of keeping us at work on five hundred dollars, or so, a year. She will send us out to be exhibited at the World's Fair as the only specimens of the sort in the universe. And when we are sent back we shall find a position awaiting us in a glass case in some museum. Oh, no; we don't have to be *perfect* teachers in order to accomplish something. All we need is, as our Methodist friends put it, to be going on toward perfection.

And I am not going to prescribe any set formularies for teaching beginners. There is the widest opportunity for the development of individuality in method in the teaching of this as of almost every

subject under the sun. The only thing I would insist upon as unchangeable is the foundation principle already laid down, that the boy must learn to read Latin without the intervention of the English language between the word and the idea. Let us have that thought firmly implanted in mind, and then not confuse method with achievement. Yet I will venture to mention one thing that falls under the head of method, because I believe the surest and speediest method must start from it,—namely, that much oral work is necessary, and under this head I will say a few general words about so-called Latin prose composition, and about pronunciation.

I do firmly hold as an article of personal faith that the boy cannot easily be taught to read without a great deal more of oral work than used to be fashionable. Now by oral work I do not mean simply the recitation of paradigms of all sorts, although I do believe in that, and in a good deal of it. But if the boy is to be Romanized, he must from the threshold of his learning become practically familiar with what is a thoroughly scientific principle, that language is primarily a thing of the tongue and ear, aided by the gesticulating finger and observing eye, and not a thing of the slow-moving pen, that it is an immediate and kindling appeal straight from one man to another; and that the written word is only a representative of the living, spoken word.

Undoubtedly from one point of view, then, the best way of getting the boy to learn Latin would be to drop him down in the middle of ancient Rome and let him grow up there. But ancient Rome is not in existence, and even if it were, the complete result of our experiment would be to create one more Roman, and not that far nobler product that we are after, an American boy with mind broadened and quickened by an acute sympathy with and knowledge of the Romans.

Well, then, shall we try to teach him even in this late and foreign land to speak Latin like his mother-tongue, and so make the language live again in him? But can this be done, even if it be desirable? I am afraid that within the years of his school-life we should not have time to teach him much of anything else. We might better spend our time in teaching him to speak English,—for I do not believe nine persons out of ten can ever, within ordinary limitations as to time, learn readily to speak a foreign language except among a people who speak it. What we can do with our

boy is to train him to understand Latin,—at any rate, literary Latin,—and it is Latin literature we are pressing forward to,—when he does hear it. Everybody knows that the ordinary child will understand a far better style of speech than he can himself utter. And so the boy can learn to have the foreign words picture themselves to his mind immediately, and not intermediately, in the natural order of the language, as it flows from the speaker's lips, even though he cannot perfectly reproduce those pictures in similar language without previous preparation. That is, the power of composition, of reproduction, will inevitably, save for a few, lag behind the power of comprehension. But it must not drop out of sight altogether, as it seems prone to do, so far as I can judge from the condition of the average boy who comes to college. He may be able to write out a fine translation of a passage of Latin previously unseen, though in all probability, if the examiner should read the passage to him, he would find it nothing but a jumble of meaningless sounds. But he makes awful work of writing out in Latin a simple passage of previously unseen English. And yet that boy has had the usual amount of training in Latin composition. The trouble is just here, that his training in Latin composition has not gone right along with his other training in Latin from first to last. He has learned all his prose composition, with the exception of certain exercises laid down in black and white in his first lesson-book, from a book on Latin prose composition, which had set passages and copious grammatical references. As a result, whenever he has to express an idea of—purpose, let us say—he tries to think of a particular lesson in his book, or of the wording of § 376*a* of the grammar, and to cipher out his verb-form accordingly. And yet it ought to be as instinctive an act to him,—that utterance of the, 'say, subjunctive form under those circumstances,—as the choice of the word 'sun' rather than 'moon' to indicate the orb of day. This instinctively correct use of the language that springs from an inner grasp of it can be cultivated only by oral drill every day, from the very beginning, in the expression in Latin of ideas based on those presented by the Latin text that day studied. In the very first days of the study this exercise will, of course, be extremely simple, but it will tend in the same direction as the more complex and varied exercises possible later,—that of making the boy think in Latin without the intervention of English.

The form of the question on the very first lesson is not a matter of no importance, or of slight importance. Ask the boy what the Latin word for 'table' is, and you start him off on one track : ask him what a Roman said when he wanted his friend to think of that sort of a thing [pointing], and you start him off on another. By the first form you prompt him to think of an equation between two words ; by the second, of an equation between a word and an idea. And the second form is the keynote of the best training,—I had wellnigh said of the only effective training,—in so-called composition. It is surprising in how short a time the boy can learn to express whole sentences, and then series of sentences, orally, without previous specific preparation of anything except the given modicum of Latin text. I should not advise the indefinite postponement of the careful *preparation* of translations into Latin from set passages of English, yet such translations need be only occasional, and should not take the place of this spontaneous work of every day.

But I am in danger of overrunning your patience and my time. I must say a few hurried words about the matter of pronunciation. I have been pleading the necessity of much oral work, of continual translation at hearing, as the only means of learning to understand Latin as the Romans understood it, in the order as well as in the character of the thought. Now this presupposes some consistently intelligible scheme of pronunciation, though it does not determine what that scheme should be. I will only remark that it is idle to try to read Latin verse with anything but a purely quantitative scheme of pronunciation. What a miserable wreck does Vergil's stately measure become when waltzed through in triple instead of quadruple time ! And how can the boy, when he comes to Horace, have the slightest conception of what a logaoedic rhythm really is, if he has never learned to read a dactyl correctly. As well talk to a blind man about the beautiful colors of the autumn leaves, as to him about the peculiar rhythmic ripple of cyclic dactyls in trochaic measures. But how few teachers ever make quantity a real thing to their pupils, or give them any training in the proper reading of so simple a metre as the dactylic hexameter ? How can they accomplish anything in this direction if they allow the boy for the first year or two to think the rules of quantity invented only for the sake of determining the position of the accent, and then, when he comes to Vergil,

make him learn page after page of so-called 'rules' of quantity in detail, as if they had to do with poetry only? What wonder that he thinks Latin verse simply a very ingenious, semi-mathematical puzzle? But if the first words that he learns from the lips of his teacher, and all subsequent words, are correctly pronounced, and his attention called to the necessity of precise imitation, he will never need to study those tedious rules and lists of exceptions at the end of his grammar. He will pronounce words correctly as by second nature. And when he comes to Vergil he will read the verses correctly without any study of the metre, because the long and short syllables in proper time and proper succession run from his tongue naturally, just as he learned to pronounce the words in his first year at the language. Let us have quantitative pronunciation, then, from the first, not for the sake of archæological correctness, but of practical utility.

I have thus said that the training in Latin for the sake of culture must begin with the beginning of work in Latin; that the immediate aim must be to make the boy live and think and feel after the Roman fashion; that the first door to this is by training him in the ability to understand the Latin language at sight and hearing without even a mental translation of it into English; and that the best method to this end demands much oral work, daily drill in the expression in Latin of ideas based on those of the passage set for the day's reading, and constant observance of quantity in oral reading.

In all these matters the teacher needs to cultivate in himself correctness, swiftness and precision of judgment,—but all this will be of little avail if he cannot rouse within himself that keen delight in his work, that element of enthusiasm, which his pupils cannot help catching. If he lack that, he need hope for no marked success in this field. The most perfect system is but a graven image, cold and expressionless, if it lacks the vital spark of enthusiasm which alone can make it a living soul.

*Elmer Truesdell Merrill.*

*Wesleyan University, Middletown, Conn.*

## THE DIFFERENTIATION OF THE HIGH SCHOOL, THE COMING MOVEMENT IN EDUCATION.

Two articles in the February number of the *School Review* treat, 1st Of the High School and its enemies. 2d Of the Curriculum for Secondary Education, now under consideration by the National Council of Education. Permit me to say that I do not think the problem has yet been grasped in its entirety and that it cannot be satisfactorily settled until all the factors are considered. The opposition to the high school has lain in the facts that but a small proportion—five per cent. of the school population are there educated, and that its curriculum has been too much subordinated to college and University requirements. The last error is now perceived, yet not sufficiently perceived. When this is remedied, the first objection will also vanish. But this can only be done by treatment of the broadest and most thorough kind.

The educational methods of our country have been and are still for the most part scholastic, an education from books, an imparting of information about things. There has been scarcely any instruction—in the schools—in creation, in taking the raw material of nature and changing it into useful and beautiful forms, in doing that which the vast majority of people have to do for their life-work, and because imperfectly trained, do very imperfectly. A vast amount of creative work has been done outside of the schools, witness our roads, buildings, manufactures, I will not say our art, there is as yet so little to boast of—for the manifold defects of all which we are largely indebted to the lack of training, of creative instruction, in the schools.

The workers of the United States number about 22,000,000. Of these nearly half are agriculturists, 25 per cent. artisans, 20 per cent. in commerce, 5 per cent. professional. Of the school population of 8,000,000, 1 per cent. nearly, is in institutions of higher education, 5 per cent. in high schools and secondary institutions, 94 per cent. in the primary and grammar schools. Compare the two percentages. Twenty-five state universities have been founded and all sustained at large expense to educate the very much less than one per cent. of the school population

who will pass into the professional class. No lover of knowledge will regret the state universities or one dollar 'of the expense, though there may be a cry of class legislation. And every lover of knowledge will rejoice over the thousand or so of high schools with their 400,000 pupils. But every thoughtful educator must ask, how well are we educating the 94 per cent. of children who do not go beyond the grammar-school, many of whom indeed do not finish its course? Why do not more go on to the high school? Is the high school not fitting them in the best manner for their work in life?

There is one answer to these questions. It is the struggle for existence that keeps children out of the high school, and that takes them out of the grammar-school. It is because they are not there taught what they must do in life, because they are too much instructed in scholastic and not enough in creative knowledge, that their parents think they can not afford to give them more "schooling," and therefore take them away and put them to bread-winning.

It is a truism to say that the education of a country should be adapted to its needs, but in truth our education is not adapted to our present needs. We are giving a special education to the smaller class in the community—the professional—and making no provision for 94 per cent. of the workers. Agriculture, manufactures and commerce are the three material elements of national prosperity. That these three may attain high perfection is the constant effort of modern states. That this effort may be successful, it must be seconded, in fact the initiative must be taken, by the school.

I am convinced that the coming movement in education is that the school shall largely assist in training the child for its future special work in life. As the workers of the nation are agriculturists, artisans and commercial, the differentiation will naturally begin in the high school, by the addition of a commercial and an art-industrial course. These two courses will meet the needs of the commercial and artisan classes, and the latter will also assist the agriculturist, if another is not specially organized for him. The commercial course will give the special training of the so-called business colleges, book-keeping, commercial arithmetic, geography and law, with type-writing and stenography. With these should be carried on the present courses in English, science,

and a modern language. The time given should be two and when practicable three years. The art-industrial course will have special training in drawing and working in metal, wood, leather, clay, and other material. Like the commercial, it will dove-tail in with a selection from the present high school studies. The present university course should be continued, not only for those who intend to take the higher education, but as a liberal education for those who do not—for the most part young women.

The people at large have been for some time feeling the need of this special education, tentative efforts have been made in various places, but without any well-digested scheme. Two hundred thousand pupils are being instructed more or less in various parts of the country in manual-training industries. The most of this work is done in grammar schools, and of course imperfectly, but the movement is in the right direction. The only commercial high school of which I know is that of San Francisco. It has day and evening sessions, some 800 pupils, is well conducted and highly valued. Commercial departments also are a part of the high school in Pittsburg, Detroit, Waltham, probably elsewhere. In California such departments will be organized this year at Stockton and Los Angeles. For three years San Francisco also carried on at public expense the Cogswell Polytechnic School. This has now reverted to its trustees, and art-industrial features are now being tacked on to the commercial high school. No doubt it will shortly differentiate into an art-industrial school.

Of the two differentiations, at the present stage of our national progress, I consider the art-industrial the more important. Skilled artisans are at present a great need of our country. Because we did not train them, we imported them so largely that foreign artisans control our labor unions and exclude American boys. Or rather, the lack of training on the part of American boys exclude them from the art industries. France is not so neglectful. She is the most skillful and artistic manipulator in the world of the raw materials, cotton, wool, silk, metal, etc., and she is so, largely because out of one hundred and seventy schools in Paris one hundred have workshops connected with them. Mr. Mundella, then minister of education in Gladstone's cabinet, told me, several years ago, that the South Kensington Museum was founded, as a commercial enterprise, to instruct the British artisan and enable him to compete with his continental rivals, and, he added, "it is worth millions of pounds a year to England."

That art-industrial training is felt to be a great educational need is shown by some recent benefactions, notably that of Mr. Drexel in Philadelphia, and Mr. Armour in Chicago. The higher education is now pretty well provided for. It is the secondary that needs the stream of gifts. But the work is so vast that public aid must supplement private benefaction. The "plant" needed for a commercial course is not very expensive, chiefly type writing machines, and few cities need be deterred by it. But the "plant" for an art-industrial department is quite another matter, forges, lathes, tools, and an abundance of materials to work with. When the need is once clearly seen, however, clear-headed communities will not be deterred by it.

Naturally art-industrial departments will first be engrafted on high schools established in manufacturing centers and the larger cities. As their advantages are felt, the movement will extend to the smaller towns.

The three great departments of knowledge are literature, science and art. For the first only provision was made in our early educational history. During the last thirty years large room has been made for the second. It is now time to crown the work by the harmonizing presence of the third and most beautiful of the sisters. Our roads have been made, our towns and cities built. No doubt they need to be remade and rebuilt. That is a part of the process of the ages. But the era of clearing a place for ourselves and the era of strengthening ourselves among the nations have passed. Now has come the era of advancement. These three eras are like the three elements of style, clearness, strength, beauty, and have a like natural relation. If our manufactures, the things we make, are to be beautiful, our children must be taught the principles and practices of art. There are plenty of signs abroad that the demand for the trained, skilled hand is increasing. That we are yet far inferior in skill to other nations is evident by the thousands of millions we pay them annually. The tariff charges alone last year were upwards of \$450,000,000.

It may be objected that this movement will be a mere organizing of trade-schools. Better trade-schools than no schools at all. Nine-tenths of the youth of the country leave school at fourteen, many even earlier. Art-industrial and commercial schools would hold a large proportion two or three years longer, for then they would be prepared and well prepared for their work in life. Par-

ents would not grudge the time nor boys work unwillingly. Few boys are mentally fitted to be scholars or to take a University course. The majority are well-constituted mentally to be good artisans, men of business, agriculturists. They will be much better workmen for good preparation. Moreover, as already indicated, some of the usual high school studies will be united with the special training. The "generals" will not be neglected while the "specials" are enforced. The citizen will be more intelligent and the artisan more skilled. Young lives will not be stunted and dwarfed by being driven to work at too tender an age. Ideals will have time to develop under good teaching at an age when ideals are formed, the standard of intelligence will be raised, the solving of many social problems assisted, more efficient men and women be trained for the work of the commonwealth.

*Herbert Miller.*

*Marysville, Cal.*

#### ENDOWED SCHOOLS.

The secondary schools of this country may be divided into three classes, high schools maintained by general taxation, private schools supported entirely by fees paid by students, and endowed schools sustained in part by fees and in part by the income from invested funds. According to the report of the Commissioner of Education for 1888-9, there were in the United States about 725 schools of the first, 1,117 of the second, and 207 of the third class. The first class is increasing in numbers very rapidly at the expense of the other two. Popular interest in the last class has been declining for years, though at present it shows signs of a new life. It was the prevalent opinion for a time that endowed schools were not necessary, but that high schools would take their place. Experience has lead some at least to question this view, and to hold that endowed schools have still an important function in the educational system. As an advocate of this view, I wish to make a brief plea in its behalf.

Endowed schools are needed to maintain a high standard of secondary instruction. Such schools as Philips Exeter and Phil-

ips Andover have an important influence in setting the pace for other schools. These academies are never tempted to lower the standard of admission or of graduation by financial considerations. They need not be concerned about the number of pupils enrolled. There is no power outside the faculties of these institutions that brings pressure to bear to change the courses of study to suit the prevalent "fad" or the commercial view of education. High schools have their courses of study determined and the standard of excellence fixed by popular clamor which always follows a low ideal. Private and unendowed schools are similarly at the mercy of their patrons. But the amply endowed school is in a real sense independent of these influences and is at liberty to devise the best curriculum and has power to enforce a high standard of attainment. Dr. Rice's articles in the *Forum* throw some light upon the kind of schools built up under a system managed by the votes of the masses. We need at least a few schools independent of dictation and free to provide what is best for the pupil and not what the pupil or his parents wish.

Again the high schools and private schools are inadequate to meet the demands of secondary education. There are many excellent high schools in centers of population, but they are not available to a large percentage of those who are remote from these centers. The high school cannot provide for pupils who must be sent away from home for their academic instruction. Where shall this class go? Some will go to private schools, but these are often so expensive as to be unavailable to the mass of pupils. Then good private schools are few in number. They are responsible only to their patrons, who often know nothing of the value of a school and judge only by the price and the tinsel. Discipline in many of them is a thing unknown or is put upon a military basis fit only for pupils who cannot be governed at home. For the majority of pupils who are not so situated as to be able to enjoy the benefits of good high schools, and cannot meet the cost of first class private schools, endowed academies, where the expenses are moderate and the oversight parental, are needed.

It is, moreover, out of the question to expect taxpayers to provide secondary education for all citizens. The lower schools are inadequate in number and equipment and the high schools are over-crowded and scantily provided with teachers. It is foolish to expect that secondary education will be entirely maintained at

public cost. Besides, an increasing number of parents will not send their children to the public schools. They claim they are too public, that good and bad, bright and dull, are brought together in a way to spread moral pestilence and destroy the ambition of the gifted pupils. Endowed schools that are strong enough to keep out the vicious and not forced to a system of rigid grading that keeps pupils back in one subject because they are deficient in another, are needed for this class. If we admit that the greater part of the secondary instruction will continue to be given by high schools and private enterprises, a considerable field still lies open for endowed academies to fill.

Endowed academies are needed to resist the bread and butter theory of education which prevails and is gathering strength constantly. Greek must go, say the high schools. In fact the popular clamor is for only that which helps to make a man a complete machine for the turning off of work. Man as a contemplative, spiritual being is not provided for in the public school idea. The endowed school stands as a protest against this tendency. It is the hope of the college for maintaining the classical course. Even now the bad effects of training that leaves out the humanities is evident, Worse effects may follow.

The dearth of amply endowed schools is a singular fact in our educational history. There are in the whole United States less than twenty schools having endowments equalling \$100,000. While millions of dollars have been given for the endowment of colleges and universities within the last decade, almost nothing has been done to found and endow secondary schools. This neglect is especially noticeable in New York State, where in 1889-90 the total income from the invested funds of all the Academies was less than \$60,000.

It is fair to raise the question whether the tendency of the times in this matter is a happy one; whether the educational status in New York is improved by allowing voluntary schools to be driven out; whether our colleges do not suffer in rank in the educational world as a result; whether the standard of secondary instruction is not lowered thereby; whether the friends of humanistic culture can afford to allow endowed schools to be rooted out or die of neglect. These questions seem pertinent to the general discussion now in progress of the ends of education and the best means of securing them.

I am of the opinion that it is a serious mistake to ignore the endowed school as a factor in our educational development. Leaving out of account the right of the state to provide secondary schools, which there is room to doubt, a utilitarian view of the case leads me to the conclusion that voluntary schools are the proper public schools of a republic. My appeal to men of wealth, who are inclined to use their money for educational purposes, is that they do not overlook the claims of secondary schools upon their generosity. I believe no money is so wisely invested in behalf of education to-day as that given to build up such schools. New York has many wealthy men who have given and are likely to give even more lavishly in the future to found and build up educational institutions. They ought not to pass by the secondary schools.

*A. C. Hill.*

*Cook Academy, Havana, N. Y.*

## BOOK DEPARTMENT.

*A full description of the books received, giving size, price, etc., will be found in the list of Publications Received in this issue, or, generally, in a preceding issue of the SCHOOL REVIEW.*

*Longman's School Geography.* Text-book. 8vo. 384 pgs.

*Longman's New School Atlas, Political and Physical.* 39 quarto, 14 octavo maps and diagrams.

*Questions Upon Longman's School Geography.* Edited by GEO. G. CHISHOLM, M.A.B.Sc., Fellow of the Royal Geographical and Statistical Societies, and C. N. LEETE, A.M., Ph.D., Fellow of the American Geographical Society.

*Longman's School Geography* follows the old plan of Olney, Morse, and Roswell Smith. It consists of a text-book, an atlas, and a small question book of seventy-six pages. The text-book is like nearly all the financially successful text-books upon geography ever published; it is a condensed compendium of geography, physiography, and history. It has one marked advantage over most text-books upon geography in that it contains far more text. The subjects for the compendium are all well arranged, and the facts are brought up to a late date. A geographical text-book scientifically arranged, in the order of subjects and topics and adapted to the development of the minds of the pupils, is a thing of the future.

The first text-book upon geography was a compendium and all the succeeding ones, with a few marked exceptions, have followed the same order of arrangement. The reason for this is not far to seek. The publishers adapt their books to the knowledge and skill of teachers, and anything like a scientific geography has not yet foot-hold enough in America to warrant the publication of scientific text-books in that direction. Guyot's Common School Geography is probably the best pedagogical text-book upon geography, ever published, and we are informed that the sales of that excellent book were not sufficient to pay for the printing.

The Physical Geography, or Physiography, consists of forty pages containing a brief and excellent exposition of the best modern discoveries in that direction. Special attention is given to dynamical geology, and the modeling of land surfaces. No hint, however, is given in regard to how the subject should be presented to the pupils, or how the pupils may profitably study their environment, either geographical or geological.

Geography is defined as "A description of the earth." A closer definition is the one generally used, "Geography is the description of the earth's surface." The study of the history of the present appearance of the earth's surface, especially the land modeling, is organically united with the study of geography, the present appearance; but the author stops with his compendium of interesting data in regard to physiography, without any scientific attempt to teach geography in itself, that is, the science of surface.

The Mathematical Geography is of the usual kind. It is placed first, when it should be last, and it does not contain a single suggestion how mathematical geography may be studied from facts that can be easily observed. Most pupils who study mathematical geography have gained no idea of the immense number of facts that may be gained from observation all around them.

One hundred and sixteen pages are given to the geography of America. The art of describing characteristic areas of surface in a graphic, clear and comprehensive way, is exceedingly rare. One has the feeling, upon reading many such descriptions, that the author has not a distinct mental picture of the whole, himself. The attempt to describe the surface of British America or the United States, is to be commended, but there is much in these descriptions which reminds one of the old geography of isolation; as if plateaus, mountains, and plains were not parts of one complete whole, and could not be described as any unit of architecture is described, proceeding from the whole to the parts, and following the lines of the greatest parts. For instance, the depressed axis from which the Mississippi and McKenzie rivers flow, connected by a line through the Saskatchewan river basin, is a natural line of division of North America into two great land masses, each composed of two slopes. A division of North America by this line follows the psychological law of first conceiving of the greatest wholes of which the mind is capable, and then sub-dividing that whole into the greatest parts by the most easily conceived lines. The test of a geographical description is in the mental picture gained after careful reading. The mental product that should be acquired is an individual concept corresponding to the surface of North America. It may be doubted whether the closest study of the author's description would produce such a result.

There is some confusion of terms occurring,—as "water parting" in distinction to "water shed." This sentence on page ninety-eight, is somewhat misty: "The Rocky Mountain System occupies the highest part of the plateau, and *constitutes*, or contains, the "water parting" between the rivers that flow to the Pacific and those that flow to the Mississippi and Gulf of Mexico." A "water parting" is a line, and surely the Rocky Mountain System does not constitute a line. Again on page one

hundred and two, speaking of the Colorado Plateau, it is stated that "The southern water shed of the Gila River forms its southern limit, and the continental divide, its eastern." Here "water shed" and "divide" are used synonymously with "water parting."

The authors have sought to exclude from the text-book all trivial facts, and have crowded the pages with data which are important; still it must be conceded that there is in the text-book the same conventional arrangement of facts in their usual unpedagogical order. In comparison with other text-books upon geography, Longman's Geography is admirable; in comparison with anything like an ideal of what a geography of America should be, and the wealth of facts and generalizations all ready for the future writer of geography, there is much to wish.

The questions that fill the little book of seventy-eight pages, are adapted to the arousing of thought and to the exercise of reasoning power. However, the same objections can be made to the question book, naturally, that are made to the text-book,—there is very little of logical relation in the questions.

The School Atlas, containing as its main feature, fine orographical maps combined with political charts is, it is safe to say, the best school atlas for the teaching of geography, ever published in English. The teaching of geography in America is generally limited to a conglomeration of facts in regard to political geography, with here and there, a little dash of real geography. Therefore, there has never been any great demand for structural maps. It is well known that the Germans have had such maps for a long time. The attempt of Guyot to teach structural geography in this country was a failure. Book-makers have risked the publication of very little else than old, colored, meaningless, political charts.

Longman's School Atlas contains some excellent physical or orographical maps. If the text-book and questions had been adapted to the proper teaching of the maps, it would have been all that could have been desired. In the hands of a good teacher, who understands geography himself, and who uses drawing freely, with the many excellent books which are at hand for the study of geography, such as Stanford's Compendium, this atlas might be used very efficiently as a text-book in upper grammar grades, high schools, and colleges.

As a whole, these three books may be ranked among the best of modern English geographies.

*Francis W. Parker.*

*Cook County Normal School.*

*Literary Criticism for Students.* Selected from English Essays, and edited with an introduction and notes, by EDWARD T. McLAUGHLIN, Assistant Professor of English in Yale College. Henry Holt & Co., 1893.

The aim of this work of two hundred and thirty-six pages is to help the student to realize the inner meaning, and find the soul of literature, and become sympathetic with his author, and to enable him to acquire sensations, and derive enjoyment from his reading—in a word, to teach him how, and for what to read. The scientific method, which seeks in literature, as elsewhere, for facts and knowledge chiefly, and edits books with the purpose of imparting grammatical, etymological, linguistic, and rhetorical instruction, is severely arraigned.

The clever introduction of sixteen pages sets forth this aim. The two hundred and ten pages of extracts from Sir Philip Sidney, Ben Jonson, Dryden, Addison, Swift, Samuel Johnson, Wordsworth, Coleridge, Lamb, De Quincey, Carlyle, Matthew Arnold, Lowell, Ruskin, Hutton, and Pater form a body of varied criticism, a many-sided disquisition upon prose and poetry. A brief account of the author and a slight analysis of his work is prefixed to each excerpt, and at the end of the book notes are appended, questioning the student on what he has read, giving explanations and suggestions and calling his attention to points specially to be dwelt upon by him.

The aim of the work is eminently worthy. How few students of any age or attainments know how to read well; get out of a book all there is in it richly worth their getting! Some Ruth following the reapers often gleans the finest of the wheat. How few possess a taste that leads them unfailingly to the best books and to the full enjoyment of the best things in them! What new and precious beauties do we not all find in an author as we grow more cultivated, and re-read his works read often long ago? All thanks and praise, then, to him who early clarifies our vision and makes more sensitive our æsthetic appreciation.

The editor's means for attaining his end are highly commendable. Little can be said in criticism which will not seem hypercritical, and that little we hesitate to attempt.

But we wish that for our benefit the editor had made it clearer for *what* students his book is designed. If, as we suppose, it is for those in secondary schools, we are forced to think that there is very much in the extracts that is too abstract and abstruse (not to say irrelevant), and that a larger fraction of the work called for in the notes is far too difficult. College classes even might complain.

We wish that the editor had not gone back so far as Sidney, Ben Jonson and Dryden. Something of what is quoted from them is worn out, much has been better said since, and more unsaid by them, but worth the quoting, is excluded by their presence.

We wish, as a matter of patriotic pride, that more Americans had been drawn upon. Lowell is the solitary American poet—we wish that he might stand in a range. We could suggest a dozen of Lowell's countryman as available for the editor's purpose as any British authors quoted by him.

We wish that the editor had not so vigorously emphasized beauty as the essence of literature, and that he had not told the student so unqualifiedly that reading is for the sake of sensations, æsthetic enjoyment. Beauty may be the essence of poetry and the reading of this may be for sensations; but the bulk of literature is prose, and the burden it carries is thought, and thought is pebulum for the intellect.

We wish that the editor's condemnation of learned annotating had been less sweeping, and that he had not been so confident that the knowledge of allusions and of verbal and archæological suggestions should be adjourned to advanced classes and to the special student. Would not, for instance, even the less advanced pupil be helped to the meaning and so to the beauty of this line in Longfellow's *Birds of Killingworth*, "Give us, O Lord, this day our daily bread," if told by the annotator that *Lord* meant loaf-gainer and distributor? Has not the added knowledge been a help and not a hindrance? Feeling, sensation, enjoyment wait upon knowing. And lastly and *leastly* we wish that the proof-reader had wiped his spectacles a little oftener.

Brainerd Kellogg.

*Brooklyn Polytechnic Institute.*

*Geographical Illustrations.* By WILLIAM MORRIS DAVIS, Professor of Physical Geography in Harvard University.

Nothing in modern educational experience is more delightful than the new-found interest of the college men in the work of the lower schools. Such interest, like the quality of mercy, is twice blessed, enriching the giver as truly as the recipient. We may hope that when it has become universal and habitual, as it now is individual and occasional, a long stride will have been taken toward the establishment of teaching upon a professional basis beyond question.

The pamphlet before us had its origin in a desire to stimulate teachers of geography in elementary schools to better work. It embodies an address given (without notes) to the American Institute of Instruction at Narragansett Pier in the summer of 1892. The "illustrations" were drawn from an area familiar to the teachers present, and were made charmingly *objective* before the audience by the use of maps, relief models, and blackboard drawings with colored crayons, which grew under the speaker's hand, (even as the address proceeded), to new meaning and fuller force. The pamphlet, of course, is more instinct with life to those who heard it, than it can be to those who simply read it; but every

teacher of geography will be the stronger for the simple reading of it.

Professor Davis begins by calling attention to the two kinds of forces, the one constructive, the other destructive, on which the surface of the land depends for its form. Any particular spot may have been thrown up as a sand dune, or heaped up as a volcanic cone, or uplifted as a broad plateau, or crushed together and thrust aloft as a mountain range. But however constructed, as soon as formed, it suffers waste from the destructive processes of the atmosphere, and this waste material is washed down the slopes by streams and rivers toward its ultimate goal, the sea. Thus arises a whole sequence of topographical forms which are termed respectively, adolescent, mature, or old. The destructive processes do not wait for the construction to come to an end, but interrupt it at any stage; on the other hand, before the land area can be denuded to its baselevel, renewed construction often interferes. Thus composite topography occurs, and in New England it appears in great variety, and with surprising distinctness.

After a plea for the study of physical geology, *i. e.*, for a knowledge on the part of teachers of the general principles of changes of level, deformation, volcanic action, and especially of denudation, he takes Rhode Island as a field for illustration. Along the southern coast of the state he finds numerous sand bars swinging from headland to headland in long curves concave to the ocean, and shows them all to be products of work by the sea-shore waves,—an adolescent coast line. The headlands have been somewhat worn back into cliffs while sand bars are built across the bays, thus simplifying the coast line from its original equality. Then the author points out larger instances of similar wave work,—the harbor of Duluth, the Kurish harbor of the Baltic, the joining of Gibraltar to the mainland, of Cape Town to Africa, and, as a case yet incomplete, the formation of Adam's Bridge between India and Ceylon. The little sand bars enclosing ponds about Point Judith are types of the long bars of the middle and South Atlantic coasts. The low cliffs remind us of the bolder examples elsewhere, the chalk cliffs of Southern England, the cliffs of Ireland, Scotland, and the Shetland and Orkney Islands. Thus the author teaches us to impress on our pupils both the real meaning of the land as it is now, and the natural relationships that exist between our home district and various parts of the world that are like or unlike to it.

The author passes next to features dependent upon glacial action,—a most interesting field. Then he considers the valleys of the upland, cut out by the atmospheric forces of destruction, and traces them even below the surface of the sea into which the rivers run. Hence he infers a depression of the whole area during their formation. Then he views the New England plateau itself and concludes that the present surface is but the remnant left from the denudation of a mountain range once as high as the

Alps,—that, in fact, the Alps now represent the probable past of New England before it was reduced. He sums up as follows: "Our rugged New England landscape therefore offers in its larger features an excellent example of composite topography. Its upland is the remaining portion of an old lowland carved during a former cycle of denudation; its valleys mark the adolescent stage of development reached in a later cycle, the change from the earlier to the later cycle being caused by a general tilting and warping of the region, whereby one part of its surface was uplifted. The drowned valleys along the coast mark an episode of depression late in the elapsed portion of the later cycle. The drift hills and gravel plains are the record of a peculiar accident—a glacial invasion—by which the normal advance of the cycle was for a time interrupted. These are the natural relations of our geographical features, and I believe that our plan of teaching should be closely in accord with them."

The whole pamphlet is thoroughly helpful to teachers of geography. It emphasizes not only the physical element in geography, but also the need of a broad grasp of the subject by the teacher, and of intelligent methods and means of presenting the facts to the pupils. It should be epoch-making through its stimulating effect.

Ray Greene Huling.

High School, Cambridge, Mass.

*Select Orations and Letters of Cicero. with an Introduction, Notes, and Vocabulary.* By FRANCIS W. KELSEY. Boston. Allyn & Bacon. 1892.

Professor Kelsey, in adding to the number of school editions of Cicero, was evidently prompted by a conviction that there was an advantageous position still unoccupied in the "Battle of the Books." The book does not, to be sure, add anything new to our knowledge of Cicero, nor would the editor make such a claim for it. It aims merely to present certain important parts of what is already known in the most attractive and impressive form, and in this it is eminently successful. To eight orations of Cicero, viz., in *Catilinam* (I-IV), *de imperio Cn. Pompei*, *pro Marcello*, *pro Archia poeta*, in *Antonium* (IV), are added forty-six of his letters, selected from those written to members of his family, to Atticus and to other friends. The purpose of this addition is to introduce to the school-boy a side of Cicero's life and thought which he commonly hears nothing about. The general introduction is divided into four parts. The first reviews the life of Cicero and gives an appreciative account of him as an orator, a writer, and as a man. In the second, after giving a general summary of all the orations, with the date at which each was delivered, the editor takes up each of the eight orations contained in the book, gives an account of the occasion and circumstances of delivery and of the events

that led up to it, and by careful analysis brings out clearly the masterly skill with which Cicero framed his argument to achieve his ends. This is so very systematically and carefully done that it may be called one of the features of the book. The third part consists of an essay on Private Correspondence in general among the Romans and on that of Cicero in particular. The fourth gives a useful table outlining the constitution of the Roman government in the time of Cicero, with reference to the citizens, the different assemblies, and officers and state priests, legal jurisdiction and provincial administration. Occasionally the editor is led by his desire for brevity into making statements that would give wrong impressions. On page 56, for instance, speaking of the form of a letter, he says, "the place of writing was given in the ablative," without mentioning the frequent occurrence also of the locative (*e. g.*, *Brundisi, Thessalonicae, Dyrrhochi*). On the same page he makes the general statement that the letters were probably given to the world by Tiro, without a reference to the important part played by Atticus in this connection. But the presentation of each topic is, for the most part, accurate and adequate.

As regards the text, there is little especially noteworthy. Professor Kelsey, breaking away from too common precedents in our school editions, writes *i* (instead of *ii*) for the genitive singular of nouns in *-ius, -ium*. It is to be regretted that he is not equally courageous in discarding such forms as *tuus, servus, vultus*, etc., when there is so little doubt that Cicero wrote *tuos, servos, voltus*, etc. There is some justification for *maximus, optimus*, (instead of *-umus*), but where the correct form is tolerably certain, no respect for precedent should make one hesitate to use it. In accusative plural of *i* stems, we find sometimes *es*, sometimes *is*, in the same words, *e. g.*, *cives*, 93, 19; 98, 19 (the figures referring to page and line); *civis*, 90, 25; *omnes*, 90, 16; 100, 31; *omnis*, 96, 7; 99, 2.

The notes are copious and almost always judicious, helpful and well calculated to inspire thought and interest. There are, of course, many opportunities for differences of opinion, but positive errors are comparatively few. In his note on 67, 8, "*pridie Kalendas Ianuarias, i. e.*, Dec. 31, in the year 66," Professor Kelsey forgets that, at the time in question, December had only 29 days. In 71, 32, *Habes ubi ostentes*, the mood is merely said to be the "subj. of characteristic." It is quite the fashion, in explaining such constructions, to disregard altogether the potential feeling that is prominent in the mood. Such clauses are materially different from clauses like *sunt qui putent*, and might be designated as potential characterizing clauses. In 77, 22, *fore ut . . . possem* is called "a round-about form of expression, made necessary by the lack of a fut. infin. of *posse*," regardless of the fact that *posse*, as well as *velle*, is very frequently used in just such cases, though in the case of other verbs that lack a fut. infin. the cir-

cumlocution would be necessary. In 105, 32, it is not clear what the editor means by saying *haberi* is "stronger than *factum esse*." *Factum esse* would mean nothing here. If *factum esse* is intended, the difference between this and *haberi* is not satisfactorily characterized by saying that the latter is "stronger." In 134, 7, (*quisquam dubitabit, quid virtute perfecturus sit?*), *perfecturus sit* is said to be "stronger than *perficiat*." There seems hardly more difference between the two than between our "He will do" and "He is going to do." *Quid perficiat* in the above passage would cause an ambiguity which *perfecturus sit* avoids. Sometimes the periphrastic form seems to be chosen from considerations of euphony. In 151, 3, *mortis atque exsili*, the note reads: "*atque* indicates that he considers exile worse than death." It is dangerous, and would be found difficult, always to insist upon so strict a use of *atque* even in Cicero. What is to be said, for instance, of such cases as *opem atque auxilium*, or such as *aequom ac ius* and *ius atque aequom* occurring side by side in the same author? Still less justifiable, as it seems to me, is the use of "but" to translate *atque* (151, 26) and *que* (88, 20), when the added idea is found to be logically adversative to the preceding. In the sentence "I love him and he hates me," "and" adds an adversative idea and "but" might well be substituted for it, but this is very different from saying that "and" is here equivalent to "but." The *atque* above cited will give good sense if rendered by "and" and the *neque . . . que* of the other passage may be rendered "on the one hand not . . . and on the other hand." On *simillimum deo* (161, 26) is asked the question: "Might *dei* have been expected?" Our editor evidently has in mind the doubtful rule that *similis* takes the genitive with living objects. The only distinction between the genitive and the dative with *similis* that is really worth mentioning is that the genitive was the almost invariable construction of early Latin, the dative that of Silver Latin. Between the two came the period of transition when the two cases were used indifferently. The present passage is a case in hand where the rule referred to does not hold, and others are not wanting. In 174, 11, *neque eum reciperet* is translated "and were not to receive him." "Were to receive" would translate *recipiat*, or *recepturus esset* in a condition, but it does not translate *reciperet*. There is a wide difference between "if he were to come" and "if he were coming." In *Brundisio profecti sumus prid. K. Mai.* (183, 14), the epistolary tense is made equivalent to "I am just setting out." This makes prominent the idea, entirely wanting in *profecti sumus*, of the progress of the act, which would have been expressed by *proficiscebamur*. "I set out (leave) to-day" would be a much nearer equivalent. The "leave," from the point of view of the person who receives the letter, would become the historical perfect ("He left the last day of April"), but "am leaving" would not. In 183, 19, it is

difficult to see why *agam* in *Opinor, sic agam*, is translated "I may put it this way." Surely, Professor Kelsey would not regard *agam* as subjunctive. *Vident et sentiunt idem quod vos i. e. videte et sentitis* is of course a misprint. The use of "thee" and "thou" is given as an English parallel to the retention of such archaic forms as *duint* (70,17) in prayers. A closer parallel would be our use of the archaic subjunctive *e. g.*, "Thy Kingdom *come*, Thy will *be done*," etc. These few instances will suffice to illustrate what may be regarded as the faults of the book, but they are neither numerous enough, nor serious enough greatly to lessen its usefulness. Throughout the notes there are frequent references to the grammars of Allen and Greenough, Gildersleeve, and Harkness. After the notes come a few pages of "Helps to the Study of Cicero" which will be found useful especially to teachers. The last 150 pages of the book are devoted to a table of idioms and phrases and to a good vocabulary in which all long vowels are carefully marked. The book may be confidently recommended as an excellent edition for the use of preparatory schools.

H. C. Elmer.

Cornell University.

*Some Hints on Learning to Draw.* By G. W. CALDWELL HUTCHINSON. Art Master, Clifton College. MacMillan & Co., London and New York, 1893.

A book on "Learning to Draw" which starts out, in these days of rabid excitement about "manual training," with the assertion that the education of the eye to *see* is of more importance than that of the hand to *do*, cannot fail to interest one to look farther into its pages, which it is much to be regretted do not sustain this interest.

That the hand will obey the eye is a most valuable point to make, and cannot be too strongly insisted upon; but the hand will more readily obey the *mind*; and after the first promise of training the eye to the direct observation of nature, the author falls back into the old method of establishing *rules* to see by, and a system is formulated quite irrespective of some obvious effects which the eye ought to perceive.

The most elementary knowledge of perspective would show that a rectangular solid cannot be placed in such relation to the spectator as to exhibit three of its sides, and the appearance of only two of them be affected by the position; yet in the example given in the book, the one side is drawn full size; and as in figure 13, p. 36—"particular notice" is given that "*G H is not a receding line.*" This is fundamentally wrong *as observation*, and is only admitted in the poorest sort of mechanical parallel perspective. Figure 6 shows this even more clearly, as it would be impossible for the observer to look along a line of such extent as

that covered by objects 1, 2, and 3, and not be conscious of the line rising.

The idea of bald, fine outline as necessary preparation in drawing is now obsolete, and the importance given it in this volume is too great, for we have found that in teaching art (of which drawing is the basis) as *education*, not a *trade*—that human minds are very varied in their ways of acquiring the *same* knowledge. Some students require to make in clay or other plastic substance the *concrete*, in order to understand the outline; others require masses of light and shade to comprehend this. Some, of course, perceive the abstract form readily, for outline *is* abstract, the most so of any method of rendering which is practical, and it is not easy, but extremely difficult to divest relief of its complications of light and shade, and give the pure line.

Regarding directions for self-help it is certainly not so good a method to measure the greater distance by the lesser, as the reverse; for it is much more reliable to estimate by means of the pencil you hold up to the object for this purpose, the smaller distance upon the larger, which you *first* take, than to shift your pencil along to test it by the other methods, which must leave you still somewhat uncertain of your proportions.

All such statements as: "The eye sees what the eye brings means of seeing," and "the report of the eye is the truest report that can be carried to the mind by any of the senses," are advantageous and wholesome; and the pity is that all which follow are not based upon this text instead of so much upon calculation.

I think most drawing instructors will agree that it is radically wrong to start a drawing of a cast of a leaf, as advised on page seventy-nine—by locating the principal veins first, because "it will be found easier to draw the stand or mount for the leaves last, as it is generally more difficult to place the leaf accurately in the stand than to place the stand accurately around the leaf. This is so because the proportions of the leaf are more easily obtained than those of the stand." This is exactly the opposite of William M. Hunt's advice, which is elsewhere through the book repeatedly urged to "get the *big* things first! One should have their plot of ground, and then build on it, rather than run the risk of making their plans too large.

The illustrations, barring the false perspective, are for the most part good, and well chosen; but all such books only tend to convince one, (if farther proof is necessary,) that drawing cannot be taught by the written word, or by diagrams, or systems of measurements—or the most minute directions how to prepare "to begin." It requires a practical experience, and contact with the teacher, to accomplish this.

Howard Fremont Stratton.

School of Industrial Art,  
Pennsylvania Museum, Philadelphia, Pa.

*Representative English Literature from Chaucer to Tennyson.* By HENRY S. PANCOAST. New York : Henry Holt and Company. Size 5¼ x 8 in. pp. xiii + 514.

Mr. Pancoast has made a good book. He has tried to help the student to study the representative master pieces of the great epochs of English Literature in the light of the men and the time which produced them, to make him feel further that every literary epoch is but an episode in a continuous and intelligible story of literary development. This avowed purpose he has worthily embodied. He divides the work into four parts, the Period of Preparation the Period of Italian Influence, the Period of French Influence, and the Modern English Period. Probably he himself would not claim that these divisions are final. Certainly any division of this kind must be largely arbitrary. He has given a good deal of space to the history and interpretation of the literature, accompanying somewhat extended extracts. The commentary is sane, judicious and appreciative. There is nothing in the book to shock conventional pedagogical conceptions ; it is altogether a commendable work. There are numerous and valuable tables, a literary map which is at least interesting, a glossary to Chaucer's selections, rich notes and references, all of which add immensely to the practical usefulness of the volume. There is such an infinite variety of English classics for school use now issued from the press, that it seems hardly necessary to include extended extracts in a work of this kind. Valuable as the complete work is, a separate edition of the part that is Mr. Pancoast's own, would probably find even a wider circle of users.

C. H. Thurber.

*Report of the Commissioner of Education for 1889-90.* Two Volumes. Washington : Government Printing Office.

The second annual report of Dr. Harris as Commissioner of Education which has just appeared from the Government Printing Office is a most valuable contribution to pedagogical literature, and amply justifies the high expectations that were raised among educators when Dr. Harris was called to this post. It is impossible in a brief review to convey any impression of the enormous amount of statistical and other information on the school systems of the entire civilized world which is contained in these volumes. Volume I is occupied entirely with reports on the educational systems of the various countries, compiled in the main by different specialists. Among the more important are the Educational Congress at Paris in 1889 ; the Educational System of Scotland ; the Educational System of England ; Educational System of France ; Education in Germany ; the Higher Schools of Prussia and the School Conference of 1890 ; Education in Austria-Hungary, and a brief statement of the school systems of Prussia, Aus-

tria, Norway and Denmark. There is a most interesting and valuable chapter on City School Systems and two elaborate chapters on Professional Education. There are besides competent discussions of such subjects as Social Pathology in Education; the Reformation of Juvenile Offenders; Education of the Colored Race; Swedish Gymnastics, etc., while all the topics of school administration, such as Compulsory Education, Readjustment of School Programmes, Higher Education, Kindergarten, Manual Training, Physical Training, Reading and Literature, Religious and Moral Training, School Discipline, and Text Books are intelligently discussed. In view of the International Congresses on Education in Chicago this year, the Report on the International Congress at Paris will doubtless arouse much interest. The accounts of foreign systems in the present report admirably supplement the excellent beginning made in the report for 1888-89. The two reports together are a mine of information upon foreign educational systems. In collecting such a body of information, the Bureau of Education is performing a most valuable service for the educators of the United States.

C. H. Thurber.

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#### NOTES.

*Outline of the Principles of History (Grundriss der Historik).* By JOHANN GUSTAV DROYSEN, late Professor of History in the University of Berlin. With a biographical sketch of the author. Translated by E. Benjamin Andrews, President of Brown University. Boston: Ginn & Co.

While not a text-book, even for the most advanced classes, there is in the whole literature of history no more suggestive book, whether for teacher or student, than Droysen's *Historik*; and President Andrew's painstaking English translation will be eagerly welcomed by all workers in history to whom philosophical German is not easy reading. Not that easy reading is just the word for Dr. Andrew's English. It may be doubted whether he has made the book more clear by shunning the technical but definite philosophical terms of the original, or more readable by his circumlocutions and expansions. But it is English, and well-considered, adequate English, which blinks no difficulties and tolerates no ambiguities. For more than a decade, indeed, the task has been ripening in the translator's mind, and there is added to the volume a facsimile of the letter by which in 1884 the author sanctioned his undertaking. Not the least interesting part of the volume is the excellent biographical sketch of Droysen translated from the German by Dr. Hermann Krüger. There can be no nobler antidote to the materialistic trend which still marks much of historical and sociological work, especially on this side of the Atlantic, than the thoughtful reading of this book—"the weightiest book of its size," thinks President Andrews, "composed in our century."

*Herodotus, Bks. V and VI.* Edited with Notes and Appendices by EVELYN ABBOTT, M.A., LL.D. (Clarendon Press Series). N. Y.: MacMillan & Co.

In editing Herodotus, Books v. and vi., Dr. Evelyn Abbott has had in view chiefly the needs of historical students, and has confined himself mostly to such notes and illustrations as conduce to this aim. The novelty and value of the work depend chiefly on the opinions and illustrations contained in twenty-three essays which discuss various historical and chronological *cruces*, with the acumen, research, and sobriety for which Dr. Abbott is distinguished. In some cases where no decision is reached, the editor provides the student with a sufficient apparatus, by collecting all the excerpts from original authorities that bear on the question. Instances of the questions discussed are the period of Pheidon of Argos, the relation of Greece to Egypt, and the apparently insoluble difficulties connected with Herodotus's narrative of the battle of Marathon. The latter essay is illustrated by an admirable map, which incidentally displays the philosophic suspense of Dr. Abbott's mind, by an interrogation-point attached to the spot marked "Tumulus of the Athenians." The same spirit shows itself in the suggestive remark, page 301: "We are as yet quite ignorant of the ethnology of those early Mycenians; we may call them Danaï or Achæans, but these names really mean nothing. . . . The princes of Mycenæ may have dwelt in Mycenæ without being Greeks; they may have been some Oriental invaders holding the same position which the Romans held in Britain, and like them leaving traces of their sojourn, though they were entirely driven out of the country. They may have been Egyptians, as Herodotus asserts, and their kings may have been displaced by another alien (Ægean) race from Asia Minor, the Pelopids of legend." This sufficiently cautious observation shows a slight advance on the complete agnosticism of Grote as to the mythical period.—*Evening Post*.

*A Course of Practical Elementary Biology.* By JOHN BIDGOOD, B.Sc., F.L.S. New York: Longmans, Green & Co. Size 4¼x7¼ in. pp. vi+353.

It appears to be a bold matter to recommend the student to commence the study of Biology with the simplest forms. It is said that he should proceed from the known to the unknown, and should therefore commence the study of the vegetable side of the science with the flowering plants, and the animal side with the vertebrates. Setting aside the undoubted fact that the flowering plant is, to the beginner, as unknown botanically as yeast, and the frog, zoologically, as amœba, it is also a correct principle that the beginner should proceed from the simple to the complex, and that course is followed here. It is true that the simplest forms are also among the smallest, and beginning at this end necessitates some facility in the use of the microscope. The biologist must, however, like any other workman, commence by learning the use of his tools.

The scope of this work is indicated by this selection from the titles of the eighteen chapters: Yeast; Protococcus; Bacteria, or Schizomycetes; The Male Fern; The White Dead Nettle; Special Physiology of the Vascular Plants; Amœba; Colorless Blood-Corpuscles; Vorticella (the Bell Animalcule); The Pond, or Swan Mussel; The River Grayfish; The Common Grass Frog. The word "elementary" in the title has its original significance. This is not a "child's book of nature." For the maturer student, as well as for the teacher, it must have great interest and value. The paper and presswork are attractive and the cuts admirably clear. Many of the illustrations are new and have been drawn for this book.

*English Prose Selections.* With Critical Introductions by various writers, and General Introductions to each Period. Edited by HENRY CRAIK, C.B., LL.D. Vol. I. 14th to 16th Century. N. Y.: MacMillan & Co.

These selections contain, in addition to the representative extracts in the text, a general introduction to each period, and critical introductions to each author by various writers. The first volume covers the period from the 14th to the 16th century.—“The object of this collection, Mr. Craik writes in his preface, which has been designated to form a companion to Mr. Humphry Ward's four volumes of *Selections from the English Poets*, is to show the growth and development of English prose, by extracts from the principal and most characteristic writers. In the introductory notice to each author—for which the editor has been fortunate enough to secure the co-operation of the following well known writers: Canon Ainger, Vernon Blackburn, J. Churton Collins, Madame Mary Darmesteter, J. M. Dodds, Edmund Gosse, Prof. J. W. Hales, Prof. W. P. Ker, Prof. Minto, Norman Moore, Principal Reichel, F. H. Trench, G. Saintsbury, Principal Ward, and C. Whibley—only so much of biographical detail has been given as may enable the reader to judge the general circumstances of the author's life and surroundings, and the scope of his work; and to this is added a critical description of his style and methods, and of his place in the development of English prose. It is thought that the specimens thus brought together may prove useful to the study of our literature, as a supplement to the histories of that literature now chiefly in use.”

*Geometry in the Grammar School. An Essay.* By PAUL H. HANUS. Boston: D. C. Heath & Co. Size 5x7¼ in. pp. iv+52.

This book has grown out of lectures to the teachers of the seventh, eighth, and ninth grades in the grammar schools of Cambridge, and formed part of the plan by which Harvard University gave instruction to teachers of the grammar schools in certain subjects introduced into the curriculum. The Essay covers:

- a. A discussion of the subject-matter to be selected for grammar school work in geometry.
- b. The method of teaching.
- c. Illustrative class exercises.
- d. An outline of the work in geometry for the last three years of the grammar school.

The author believes that for geometry as well as for geography field work is well nigh indispensable, and that teacher and pupil must work together in discovering the facts and their relations, and that this may thus be accomplished by skillful questioning without the use of the text-book containing the definitions, solutions and demonstrations. Teachers of geometry will find this little book suggestive reading.

*The City-State of the Greeks and Romans.* A Survey Introductory to the Study of Ancient History. By W. WARDE FOWLER, M.A., Sub-rector of Lincoln College, Oxford. New York: MacMillan & Co.

This work is an expansion of a short series of lectures given for several successive years to men just beginning the study of ancient history in the school of *Literæ Humaniores* at Oxford. Starting with the genesis and nature of the City-State and its first form of government, the rise of Aristocracy, and its transition to Democracy in Greece, as finally realized in Athens, Mr. Warde Fowler discusses the period of transition at Rome, the Perfection of Oligarchy, and the internal and external causes of the decay of the City-State and its final dissolution in the Roman Empire. The purpose seems to be to present an outline biography of that form of State in and under which both Greeks and Romans lived, and made their contributions

to the progress of civilization. The work is much more than its modest title implies; it is an introduction to the Science of Comparative Politics and an important contribution to Sociology. It will be a valuable addition to the library of a teacher or school.

*A Text-Book of Needlework, Knitting, and Cutting Out, with Methods of Teaching.* By ELIZABETH ROSEVEAR, Senior Teacher and Lecturer on Needlework at the Training College, Stockwell, London. pp. xvi+460. Macmillan & Co., London & New York.

We wish there were a wider field in this country for this admirable book. The idea that the schools have a duty to girls to instruct them in the tasks that are to fall to them as wives and mothers, gains ground too slowly. No doubt they ought to learn all these things at home, but unfortunately they don't. Rich mothers neglect to give the necessary instruction; poor mothers haven't the time. The work before us seems to be a thorough and practical treatise on all conceivable sorts of needlework, knitting, and the like. Full instructions are given, and understanding is aided by no less than one hundred and seventy-three capital illustrations. It ought to be a valuable manual for housewives as well as the schools. Would there were a class in it wherever girls old enough to handle a needle are taught in our schools! The book makes of needlework an art and so surely classes it among the humanities.

*Typical Tales of Fancy, Romance, and History, from Shakespeare's Plays.* Edited by ROBERT R. RAYMOND, A.M. New York: Fords, Howard & Hulbert. Size  $6\frac{1}{4} \times 8\frac{1}{2}$  in. pp. vii+224.

In narrative form, largely in Shakespeare's own words, with dialogue passages from the original dramatic text, we have here the stories of "A Midsummer Night's Dream," "As You Like It," and "Julius Caesar." The book is prepared in the effort to do systematically and intelligently what thousands of parents and teachers have long been trying to do, namely, to awaken in the young a love for the great master of English literature. While not assuming to take account of the nice questions which occupy the attention of Shakespearian editors, it is believed the book contains no unwarrantable departure from the texts most generally approved. The plays selected represent three distinct types of Shakespeare's dramas and in different ways that seem peculiarly adapted to interest the youthful mind.

*The American Commonwealth.* By the RIGHT HON. JAMES BRYCE, D.C.L., author of "The Holy Roman Empire;" M. P. for Aberdeen. New Revised and Enlarged Edition with Additional Chapters. In two volumes, large 12mo. Third Edition, revised throughout. New York: MacMillan & Co.

The first volume of the third edition, revised, of this important work is just issued. Since the first edition was issued in 1888 over 46,000 copies of the authorized editions have been sold. The second volume of this third edition will be published in a few months. It has been carefully revised throughout, controverted or difficult points have been reconsidered, and many additions to and qualifications of previous statements have been made. The constitutional changes in the States since 1889 have been noted, and the census returns of 1890 have been used to correct the figures of population.

*A Text-Book on Rhetoric, supplementing the Development of the Science with Exhaustive Practice in Composition.* By BRAINERD KELLOGG, LL.D. New York: Effingham Maynard & Co. Size 5x7¼ in. pp. 345.

This is a new and improved edition of a work which has been tried by the test of twelve years' experience and not found wanting. While some things in the original work have been dropped from this, and many things, not in the original, may be found in this, the lesson numbers are not changed—the new edition can be used without confusion in the same classes with the old. Under the head of *propriety* may be found a defence of many expressions unjustly condemned by recent critics; and, under simple words, some original work representing the Latin and the Anglo-Saxon in our vocabulary.

The author is himself, one of the clearest and most vigorous of writers, as the book testifies. A key to the text-book has been published for teachers only.

*Forest Planting.* A Treatise on the Care of Woodlands and the Restoration of Denuded Timber-Lands on Plains and Mountains. By H. NICHOLAS JARCHOW, LL.D. Illustrated. Published for the Author by the Orange Judd Company, New York, 1893. 237 pp., 12 mo., cloth, \$1.50.

This publication is a timely and valuable contribution to our knowledge of forest planting, which in this country is just beginning to receive the attention which its importance demands. The reckless destruction of our magnificent woods makes it not only necessary that the remaining natural forests may be preserved but that the cleared woodlands may be replanted and the original forest covering be restored. The author believes that this can be accomplished only by a thoroughly systematic and scientific forest culture adapted to American conditions. This practical work is prepared with this end in view.

*A List of the Plants, contained in the sixth edition of Gray's Manual, of the Botany of the Northern United States.* Compiled by JOHN A. ALLEN. Published by the Herbarium of Harvard University.

This Catalogue has been prepared in response to various calls for a check-list corresponding to the revised form and extended range of Gray's Manual. By giving collectors a convenient means of indicating their desiderata and duplicates, it is hoped that the list will facilitate herbarium exchanges and prove a useful adjunct to the Manual. To secure greater convenience it has been put into pocket size, adapted to both field use and mailing.

Botanists who discover or possess plants, whether enumerated in this appendix or not, from the district covered by the Manual, and not described in it, are requested to contribute specimens to the Herbarium of Harvard University.

*Spanish Literature.* An Elementary Hand-book with Indices. By H. BUTLER CLARKE, M. A. N. Y.: Macmillan & Co.

For the general reader, who requires a less voluminous work than that of Ticknor, this book is exactly the thing, and, in giving some attention to the writers of our own age, it even supplements Ticknor to a certain extent. The independent value of the book might, indeed, have been improved if somewhat more attention had been paid to the remarkable group of living Spanish writers, whose merits the author does not fail to appreciate. The style is pleasant, and the book as readable as a manual may well be. There are useful lists of authorities, and of editions recommended for popular reading.

*Prose Passages from the Works of Francis Parkman.* Compiled by JOSEPHINE E. HODGDON. Boston: Little, Brown & Co. Size  $5\frac{1}{2} \times 8\frac{1}{4}$  in. pp. ix+117.

This volume is a part of a series of leaflets from standard authors prepared for homes, libraries and schools. The series is an attempt to answer the question, "How can our young people be led to take pleasure in the writings of our best authors?" By means of such sheets as these each teacher can have at command a larger range of authors than is otherwise possible. A good portrait of Parkman forms the frontispiece, and there are half a dozen other illustrations. The extracts are preceded by a biographical sketch of Parkman, and the selections are such as are likely to interest the young.

*A School History of the United States.* By WILLIAM SWINTON. New York: American Book Co. Size  $5 \times 7\frac{1}{2}$  in. pp. 383. Price 90 cents.

This is a revision and rewriting of Swinton's Condensed School History of the United States, which, for twenty years, has received the approval of the teaching profession in all sections of the country. An introductory chapter on Prehistoric America, and a chapter giving some account of the settlement and growth of the three colonial centers, Boston, New York, and Philadelphia, have been added by the revisers. Notes have been supplied in many places where it seemed that the interest or value of fact or scene might be increased by some side light. Most of the maps are new. The presswork and illustrations are very pleasing.

*A Pathfinder in American History.* By W. F. GORDY and W. I. TWITCH-ELL. Two parts in one volume. Boston: Lee & Shepard. Size  $5 \times 7\frac{1}{2}$  in. pp. v+261.

A somewhat careful review of the first part of this book appeared in the SCHOOL REVIEW for February, page 117. The volume before us contains the second part or text-book, the first part being confined almost exclusively to suggestion helps to the teacher. It is not at all like any other United States history. The book is full of suggestiveness and valuable references for teachers and those who are to be teachers. It is highly desirable that it should be in the hands of American history teachers, and teachers of general history will find it pedagogically suggestive.

*School Needlework.* By OLIVE C. HAPGOOD. Boston: Ginn & Co. Size  $5 \times 7\frac{1}{2}$  in. pp. 159.

It is to be hoped that the author is right in saying in the preface of this little manual, that the importance of sewing in the public schools is now generally recognized. Certainly it will be well if this work does find a large acceptance. Prepared on a more modest and simpler scale than the work mentioned above, it is probably for use in America even more practical. Simplicity with completeness seems to have been the aim of the author throughout. The diagrams are clear and well made.

*The Step-Ladder.* By MARGARET A. KLEIN. New York: A. S. Barnes & Co. Size  $5 \times 7\frac{1}{2}$  in. pp. v+162.

To those who are already acquainted with Emerson's system of teaching reading, the plan of this volume will seem natural and familiar. Its object is to put in necessary order a collection of selections which will develop the child's expressive power in natural lines, and lead him up to the point where he may use with advantage the Evolution of Expression prepared by Dr. Emerson. The authors represented are all of the best and the selections seem to have been made with judgment.

## CURRENT EDUCATIONAL LITERATURE.

*Formal Linguistic Culture through Instruction in the Mother-Tongue.*

DIRECTOR DR. VÖLCKER. Central-Organ für die Interessen des Real-schulwesens. Heft VII. July, 1893.

Dr. V. in the first place opposes the common assumption that the fundamental conceptions of grammar are best taught through the Latin. If we are to assume that a foreign language is superior to the vernacular for teaching the fundamental grammatical conceptions, the French, Dr. V. holds, must be accounted better for the purpose than the Latin. The prevalent view is that in Latin the learning of grammatical conceptions is made easy by the fact that in the Latin endings grammatical relations are expressed in visible form. But a great difficulty for the beginner is that a single form in the German frequently has to do duty for a variety of forms in the Latin. So too the beginner has to learn five declensions where one would suffice to express the grammatical relation. The same is true of the conjugations and the vast number of irregular forms which interfere with the quick and clear perception of the underlying thought. The persistent delusion that Latin alone can provide the basis for language instruction in the Gymnasium depends upon a confusion between grammatical and logical relations. All which we comprehend under the idea of the grammatical categories, depends upon a difference of meaning, not of form. In a foreign speech the more clearly the significance of the categories is expressed, the more easily is it grasped by the pupil. Now, in Latin the significance of the categories is very hard to learn because the logical relations are concealed for the most part behind many grammatical relations.

It is, Dr. V. proceeds to say, one of the fundamental errors of our pedagogy to confound the understanding of grammatical relations expressed in language forms with acquaintance with the original word-forms or with the knowledge of their phonetic changes.

That it is only through the medium of the mother-tongue that the knowledge of grammatical concepts is reached, is shown by experience, for the Latin teacher employs the mother-tongue as an illustration to explain these grammatical conceptions in their application to the Latin. The general signification and the inner connection of language forms he alone comprehends who has realized them to himself in the language in which he does his own thinking. It is only in the vernacular that the relation between content and expression is immediate for the pupil.

Dr. V. condemns as premature, and so mechanical, the refinements of grammatical analysis, *e. g.*, the classification and memorizing of the various kinds of attributes. So the teacher should depend upon the growing mental power of the pupil to master the categories. Through the gradual development of linguistic power in the mother-tongue and the clearing of ideas accompanying it, they will in the natural course of development be understood; their employment, which was at first unconscious, will gradually be transformed into conscious knowledge of them.

Even cultivated people are masters of only a part of their mother tongue, inasmuch as the words never stand for definite ideas current in the same degree of clearness among all speakers. If the use of the mother-tongue among educated adults leads so easily to misunderstandings, it is the chief task of the school to see that the pupil rightly apprehends the ideas embod-

ied in words. After suggesting the various means by which this may be attained Dr. V. remarks upon the necessity of caring for the pronunciation of German as a national duty. Among cultivated people hardly one is so careless of the pronunciation of the mother-tongue as the German, hardly one so careful as the French. As a corrective of this fault the study of French is recommended.

Speech and thought are inseparable and so for the school the principle holds good that the entire mental development proceeds hand in hand with the mother-tongue. That an impression may be translated into language, it must be clearly defined in consciousness. It is accordingly the task of the teacher so to explain the reading lesson and bring it within the comprehension of the pupils, that they shall feel themselves transported to the point of view from which the author has chosen the verbal expression, so they shall feel the point and appropriateness of the words to express the author's meaning; and this effect will be produced in the degree that the language of the reading lesson is that of a masterpiece.

The teacher should give before the class a careful reading of the piece. Then should follow an analysis and explanation. In the lower classes the pupils should give simple reproductions of the piece. In the intermediate classes there should follow statements of the contents, abstracts, and descriptions. The essentials should be seized upon. Conciseness and clearness of expression are the qualities desired.

Poetry is of especial value for strengthening the language sense, but regard for practical literature has led to a pedagogical one-sidedness. Scientific prose has been almost wholly banished from the school. This should be remedied by employing extracts from the great scientific writers, particularly those of stylistic excellence.

So far Dr. V. has discussed only that part of education which aims at perception and knowledge, but more important is that which seeks to call forth the pupil's activity. Knowledge must be translated into action.

Oral expression and written exercises afford the field for the exercise of the pupil's powers. The requirement that not only in the German recitation, but in all the work of instruction the pupil be trained to the right use of the mother-tongue is as evident as its fulfillment is difficult. The demands of the subject-matter make it impossible for even the best teacher everywhere and at every time to give the necessary time and attention to the care of form. Particularly in full classes the difficulties are very great. Essay work hitherto, Dr. V. continues, has not to any particular extent furthered the development of the linguistic sense nor resulted in securing clearness of ideas, because the compositions very frequently suffered from a certain formalism, resulting chiefly from the influence of philosophy, the relation of the school to the church, and the imitation of Latin models. After discussing these influences Dr. V. pauses to condemn a kind of essay work which by the making of phrases, and by transcriptions from histories of literature and other ill-understood "authorities" has produced an inflated style which German education must strive to counteract. It is a kind of sophistical performance to allow pupils without any self impulse thereto to write about chance topics of every period. They should write only of that which belongs to their own sphere of activity, that for which they have a personal interest and to which they sustain a necessary relation. Too often, even up to the work of the highest classes, the essays are merely an exercise of the memory. The art of essay work consists in having the pupil put into words that which he has himself seen, felt, and thought. Composition work should grow out of the oral accounts which pupils should give of the subjects of which they are master. "To have the pupil talk again and again of the things he understands, that," says Dr. V. quoting Hildebrand, "is the right method by which to proceed to composition." Hitherto procedure has suffered from the great mistake that material for composition has been to a greater or less extent artificially introduced merely for

the purpose of having it written about. But words must forsake the boy, if he quits his habitual line of thought, which ever affords his unembarrassed speech an abundance of material for working over. Pupils must write from their experience; but their experience comes to them essentially from their training in school. What they have received from their own perception and observation, what under the guidance of their special teacher they have appropriated to themselves and transformed, that they can give oral accounts of and also set forth in writing. The essay thus from the lowest grade up ought not to be treated merely as an artificial literary performance to be practiced only in the course of instruction; the thoroughgoing separation between oral and written discourse must cease.

To portray that which is essential, concrete, vividly and unambiguously, is not easy, every lack of clearness in speech is immediately noticeable; word and thing must correspond in the exactest way, and what in the oral discourse seems clear to the hearer often appears unsound when we examine the written words.

Formal culture may well be called the skill clearly to group and set forth involved matters of fact and to exhibit their conformity to law. It includes the faculty of making accurate and many-sided observation, the ability to distinguish unerringly between the essential and the unessential, sureness in investigation, exposition, and proof. The way to attain this skill is through practice in all these forms of mental activity. Now the exercises to which the facts and problems of the natural sciences furnish the material, are of no less importance for our youth, than those which the linguistic-historical education offers. At any rate practice in both spheres is necessary.

This part of his discussion, which is to be continued, Dr. V. concludes with the statement: "We must demand for all classes of the higher school a daily recitation in German."

F. H. Howard.

*Primary Teachers and Secondary Education.* The Schoolmaster, (London) July 8, 1893.)

"Concert and system," wrote Matthew Arnold, and the phrase may well stand as the *mot d'ordre* of the day. There is a striving towards system and concert in rational public education. The seventies saw the establishment of the Primary School as a national concern; the eighties saw its development and amendment; the nineties will see its correlation and federation with the secondary school, the technical and science school, the school of art, and perhaps the university. English education has long been "without form and void," but now the time of concert and system is at hand.

So long as the public elementary school has been treated as a thing apart anything like correlation and federation has seemed impossible. We have long advocated this ideal as the organ of the National Union of Teachers, and now it seems within measurable distance. The President of the Union raised the demand for concert and system at Liverpool the other day, and its Secretary more recently at Oxford.

There must be no finality and no abrupt termination to the professional development and elevation of the certificated teacher. Just as the higher schools shall not cater for the higher classes alone, so the best schools shall be open to the best teachers, from whatever grade or source they come. Care must be taken that social and pecuniary prejudices shall not have all the say in determining the state organization of the secondary school.

We insist that Secondary Education shall be developed organically and symmetrically out of Primary Education; that there shall be a career in Secondary institutions for the best teachers from Primary Schools; upon

unity and continuity, concert and system, for the schools; upon unity and continuity for the teaching profession. The danger ahead is the drawing a hard and fast line of demarcation.

From partial returns we learn that there are in England and Wales forty-nine Higher Grade Board Schools actually established, and eleven others in course of construction. There are also certain Higher Grade Voluntary Schools; and in several towns where no reorganized Higher Grade Schools exist (as in London, Liverpool, and Newcastle), there are many schools which include in the curriculum instruction in science and art. About fifty thousand pupils are provided for in the Higher Grade Schools, and higher instruction in Science and Art is imparted to at least two hundred thousand. There are twenty-seven organized Science Schools. The teachers employed in this work are nearly all certificated teachers. The most enlightened men and women in the reorganized Secondary Schools condemn the enemies of system and continuity, and heartily support the idea of unity in the profession. In the coming parliamentary and national discussion of the problem we urge the teachers of the State Schools of the country to keep the whole question of the organization of Secondary Education as prominently to the fore as they are doing at this moment.

O. B. Rhodes.

*The Philosophy of Education.* The Educational Times, (Holborn, W. C.), July, 1893. p. 300.

During the past session a course of five lectures on the Philosophy of Education was given, to those members of the Johns Hopkins University who are engaged in teaching or who expect to become teachers, by William T. Harris, LL.D., Commissioner of Education of the United States. The Commissioner has favored us with a copy of the lectures, and the following is an abstract:

#### LECTURE II.—PROBLEMS PECULIAR TO AMERICAN EDUCATION.

There are two kinds of education. The first may be called substantial education—the education by means of the memory; the education which gives to the individual methods and habits and the fundamentals of knowledge. It is this education which the child begins to receive from its birth. This sort of education is education by authority—that is, the individual accepts the authority of the teacher for the truth of what he is told, and does not question it or seek to obtain insight into the reason for its being so. It is this education by authority—the education of the past—that the modern or second kind of education seeks to supersede. This second kind may be called individual or scientific education; it is the education of insight as opposed to that of authority. When this kind of education is acquired, it frees the individual from the authority of the other. Under the system of education by authority, when told, for instance, that the sum of three angles of a triangle is equal to two right angles, this will be blindly believed only as long as authority sanctions this belief; but when an insight into the reason for this geometrical truth is obtained, no change of authority is able to make the individual doubt. But there is this danger in the system of education by insight, if begun too early, that the individual tends to become so self-conceited with what he considers knowledge gotten by his own personal thought and research, that he drifts toward empty agnosticism with the casting overboard of all authority. It is therefore necessary that this excessive conceit of self which this modern scientific method of education fosters, be lessened by building on the safe foundations of what has been described as the education of authority. The problems of the reform movement centre, therefore, on the proper method of replacing this authoritative or passive method of education by education through self-activity.

There is another problem—that of the method of study. Germany advises us to teach by oral methods, by giving pieces of information and insight orally by word of mouth. But the American educators have blundered upon what may be defended as the correct method, namely, the text-book method. It was merely the outcome of an unconscious trend. The method is of course liable to very serious abuse, but the good points greatly outweigh the bad. It has the advantage of making one independent of his teacher, you can take your book wherever you please. You cannot do that with the great lecturer, neither can you question him as you can the book, nor can you select the time for hearing the great teacher talk as you can for reading the book; and it is true that nearly all the great teachers have embodied their ideas in books. The greatest danger of text-book education is verbatim, parrot-like recitation; but even then from the poorest text-book a great deal of knowledge can be gleaned. Then there is the alertness which in any large class will necessarily be engendered by an intelligent understanding and criticism of the results arrived at by different pupils in discussing a certain piece of work given in his own words. And then there is the advantage to be found in the fact that with the text-book the child can be busy by itself. Lastly, there is the problem of discipline. There should be very little corporal punishment; the milder forms of restraint should be used. The child that is brought up accustomed to rods loses his self-respect and may become the man who must have police surveillance. Silence, punctuality, regularity, and industry are fundamental parts of a "substantial education" as much as the critical study of mathematics, literature, science, and history is a part of the "education of insight." These two kinds of education, that of authority and that of self-activity, should be made complementary.

*A Model Library.* The Evening Post, New York, August 14, 1893.

An excellent educational exhibit at the World's Fair is that of a popular library shown by the Bureau of Education in the United States Building. The books composing it form a part of a selection of 5,230 volumes, made by a committee of the American Library Association "who passed upon the suggestion of about seventy-five librarians and specialists." They are the gifts of the respective publishers, American and foreign, and will, at the close of the Exposition, be deposited permanently with the Bureau of Education at Washington. The "A. L. A." has provided three catalogues of which two are given in the recent pamphlet issue No. 200 of the Bureau. Whenever it is desired to found a public library of the size indicated there is ready to hand in these catalogues not only a good working list of books, logically grouped, with date of publication, name and address of publisher, and price, but also, "the proper class numbers, dictionary headings, and author entries"—in other words, a model for arranging on the shelves and cataloguing. Women graduates of the New York State Library School at Albany have borne the brunt of this disinterested labor. Biography and Fiction have been set apart in advance of the classifications. Juvenile publications are not separated from the mass. Standard works are often supplemented by popular abridgements, so that a ready choice is afforded if the full list prove too costly. Owners of private libraries will also find their account for stocking purposes, in this intelligent selection.

*O. B. R.*

## FOREIGN NOTES.

*The Journal of Education (London), July, 1893.*

*France.*—The following figures, taken from official documents sent to Chicago, sum up the material progress of primary education in the last twenty years: School buildings.—Between 1878 and 1892, 27,000 schools have been built, and 10,000 enlarged or repaired, at a total cost of 600,000,000 francs. Teachers.—In 1872, 110,238; in 1892, 142,660. Scholars.—In 1872, 4,722,751; in 1892, 5,623,401. Annual budget.—In 1872, 68,000,000 francs; in 1892, 168,000,000.

Another table shows the increase in the number of certificated teachers since the law of 1881. In that year the number of uncertificated was—in public schools, 2,343 men, 9,901 women; in private (or clerical) schools, 2,229 men, 12,200 women; in 1891 the numbers were 260, 3,145, 797, and 6,741 respectively.

Sunday-morning classes have been started in Paris for the purpose of preparing primary teachers for the post of manual training instructors. It has also been decided to institute an examination for such skilled mechanics as wish to become assistant instructors. The examinations will comprise five-and-a-half hours' practical work, including the preparation of working drawings and the repairing of tools, and about two hours' paper work on questions of theory.

*Germany.*—At the Thirtieth General Meeting of the Society of German Teachers, at Leipzig, on May 33 and following days, over 4,000 members were present. The chief points that came up for discussion were (1) the necessity for a more thorough education for elementary schoolmasters; and (2) the increased difficulty of the task of the teacher in consequence of the deterioration in morals which comes from the crowding to large towns. The meeting was reminded that the number of youthful criminals had increased 30 per cent. in the last ten years, and that suicide among children was no longer rare.

The Government reports for the past school year show that in Germany there are 56,560 elementary schools (in Prussia alone 34,742); of regular permanently appointed teachers 110,032 (Prussia, 70,767), of whom 13,750 (Prussia 8,494) are females. The scholars number 7,925,688 (Prussia, 4,916,476). The annual cost of maintenance (exclusive of training colleges) is about £12,120,000, of which at least £3,465,500 is paid by the State. Out of a total population of 49,428,470 there is a school for every 874 of the inhabitants. On an average there is a teacher for every 66 scholars. In Prussia there is 1 for 69, in the rest of Germany 1 for 61, in Mecklenburg-Schwerin and Hamburg 1 for 41. Next in order come Mecklenburg-Strelitz, Lübeck, Elsass-Lorraine, and Bremen. In Baden there is 1 teacher for 75, in Reuss 1 for 79, in Lippe 1 for 96. The annual cost per head is 30s. (in Prussia, 29s. 9d.; in the rest of Germany, 32s.)

*Russia.*—In the province of the Caucasus there were, at the end of 1891, no less than 3,797 educational institutions, including primary, normal, technical, Armenian, Mahomedan and Jewish schools, high schools for boys, and, not least, high schools for girls. The number of pupils in the primary schools was 142,000, or nearly 2 per cent. of the population; in the secondary schools, 11,133. It is worth noting that even in the Caucasus schools are declared to be ruining the physique of the children, especially their sight.

O. B. R.

## SOME RECENT EDUCATIONAL ARTICLES.

*Education and Selection.* By M. ALFRED FOUILLÉE. *Pop. Sci. Monthly*, July, 1893. Translated from the *Revue des Deux Mondes*.

*Educational Trend of the Northwest, The.* By the HON. D. L. KIEHLE, State Superintendent of Public Instruction of Minnesota. *Atlantic Monthly*, June, 1893.

*If Public Libraries, why not Public Museums.* By Professor EDWARD S. MORSE. *Atlantic Monthly*, July, 1893.

*Learn and Search.* By Professor RUDOLPH VIRCHOW. *Popular Science Monthly*, August, 1893.

Translation of *Lernen und Forschen*, the inaugural address of Professor Virchow as Rector of the University of Berlin. See *SCHOOL REVIEW*, Feb., 1893, p. 6-9.

*Relations of Academic and Technical Instruction.* By Professor N. S. SHALER. *Atlantic Monthly*, August, 1893.

*Teaching Physics.* By Professor FREDERICK GUTHRIE, F.R.S. *Pop. Sci. Monthly*, July, 1893.

## FOREIGN.

*Das humanistische Gymnasium.* 1893. Hef. I, II.

30 Versammlung des Vereins Rheinischer Schulmänner von Fr. Moldenhauer.

Die Einheits-schule in Ungarn u. Die neue Lehrpläne für die Gymnasien im Grossherzogtum Sachsen-Weimar, im Herzogtum Anhalt und in Hamburg.

Instruktion für die Studienreisen von österreichischen Gymnasial-Lehrern nach Italien und Griechenland.

Die erste Versammlung deutscher Historiker. v. G. Kaufmann.

Dritte Generalversammlung des Gymnasialvereins. Darin.

Bericht des Dir. Uhlig über den Stand des Vereins und der von ihm vertretenen Sache Referat des Rektor Dr. Peter über die methodische Verbindung der lateinischen und griechischen Lektüre in der Gymnasial-prima.

Coreferat des Professor Fleischmann über denselben Gegenstand.

Dritte Jahresversammlung des sächsischen Gymnasiallehrervereins.

Das holländische Gymnasium, von K. Blümlein, II.

*Pädagogischer Archiv*, July, 1893.

Beiträge zum Unterrichte in der Lehre von der Elektrizität und vom Magnetismus auf der zweiten Stufe des physikalischen Unterrichts. von Dr. Krumme.

Die Berechtigung der modernen Raumvorstellungen. von Prof. F. Pietzker.

*Zeitschrift für lateinlose höhere Schulen*, June, 1893.

Von den Hülfen des Gedächtnisses. von Schulrath Dr. Langen, Seminar direktor zu Oden-Kirchen (Rheinprovinz).

Die Jugend—und Volksspiele in den deutschen Städten im Jahre 1892.

Einiges über den Rechnenunterricht vom Dr. Krause, Oberlehrer in Cottbus. pp. 271-274.

## PUBLICATIONS RECEIVED.

## GOVERNMENT PUBLICATIONS.

- Bureau of Education. Circular of Information No. 1, 1893. Shorthand Instruction and Practice. By Julius Eusign Rockwell. Size  $5\frac{1}{4} \times 9$  in., pp. 206.
- Bureau of Education. Circular of Information No. 2, 1892. Benjamin Franklin and the University of Pennsylvania. Edited by Francis Newton Thorpe, Ph.D., Professor of American Constitutional History in the University of Pennsylvania. Size  $5\frac{1}{4} \times 9$  in., pp. 450.
- Bureau of Education. Circular of Information No. 4, 1893. Abnormal Man, being Essays on Education and Crime and Related subjects, with Digests of Literature and a Bibliography. By Arthur Macdonald, Specialist in the Bureau of Education. Size  $5\frac{1}{4} \times 9$  in., pp. 445.
- Report of the Commissioner of Education for the year 1889-90. Vol. I, containing Part I. Size  $9 \times 9$  in., pp. xxvii + 601.
- Report of the Commissioner of Education for the year 1889-90. Vol. II, containing Parts II and III. Size  $6 \times 9$  in., pp. vii + 1124.

## PEDAGOGICS.

- ATKINSON: The Professional Preparation of Secondary Teachers in the United States. By Fred Washington Atkinson. Presented to the University of Leipzig for the degree of Bachelor of Philosophy. Size  $5\frac{1}{4} \times 8\frac{1}{2}$  in., pp. 64.
- DEGARMO: Apperception; A Monograph on Psychology and Pedagogy. By Dr. Karl Lange, Director of the Higher Burgerschule, Paderborn, Germany. Translated and presented to American teachers by the following named members of the Herbert Club: Elmer E. Brown, Charles DeGarmo, Mrs. Eudora Hallmann, Florence Hall, George F. James, L. R. Kiehn, Ossian H. Laug, Herman T. Lukens, Charles F. McMurry, Frank McMurry, Theo. B. Noss, Levi L. Seeley, Margaret K. Smith. Edited by Charles De Garmo. Size  $4\frac{1}{2} \times 7\frac{1}{2}$  in., pp. 12 + 279. D. C. Heath & Co., Boston.
- GRADUATE COURSES: A Handbook for Graduate Students; with a List of Advanced Courses announced by eleven Universities of the United States for the year 1893-94. Compiled by a committee of the Graduate Club of Harvard in co-operation with committees of similar clubs at Cornell, Johns Hopkins, and Yale. Size  $5\frac{1}{2} \times 7\frac{1}{4}$  in., pp. 73. Ginn & Co., Boston.

## ENGLISH LANGUAGE AND LITERATURE.

- ARNOLD: Sohrab and Rustum; an Episode. By Matthew Arnold. Size  $4\frac{1}{4} \times 7$  in., pp. 44. Price 20 cents. American Book Co.
- CONKLIN: Practical Lessons in Language. By Benjamin Y. Conklin, Professor of Grammar School No. 3, Brooklyn, N. Y. Size  $5 \times 7\frac{1}{4}$  in., pp. 139. Price 35 cents. American Book Co., New York.
- COOK: Leigh Hunt; An Answer to the Question, "What is Poetry?" including Remarks on Versification. Edited by Albert S. Cook, Professor of Language and Literature in Yale University. Size  $4\frac{1}{4} \times 7\frac{1}{2}$  in., pp. vi + 98. Ginn & Co., Boston.
- DICKENS: The Riverside Literature Series. The Cricket on the Hearth; a Fairy Tale of Home. By Charles Dickens. Size  $4\frac{1}{2} \times 6\frac{1}{4}$  in., pp. 112. Houghton, Mifflin & Co., Boston.
- EMERSON: The American Scholar: Self-Reliance: Compensation. By Ralph Waldo Emerson. Size  $4\frac{1}{4} \times 7$  in., 108. Price 20 cents. American Book Co., New York.
- GAYLEY: The Classic Myths in English Literature, based chiefly on Bulfinch's "Age of Fable" (1855); accompanied by an Interpretative and Illustrative Commentary. Edited by Charles Mills Gayley, Professor of the English Language and Literature in the University of California. Size  $5 \times 7\frac{1}{2}$  in., pp. xxxviii + 539. Price \$1.65. Ginn & Co., Boston.
- GINN: The Thoughts of the Emperor Marcus Aurelius Antoninus. Long's translation. Edited by Edwin Ginn. Size  $5 \times 7$  in., pp. xxv + 213. Price 45 cents. Ginn & Co., Boston.
- KLEIN: The Step-Ladder; a Collection of Prose and Poetry; designed for use in Children's Classes in Elocution and for Supplementary Reading in Public and Private Schools. By Margaret A. Klein. Size  $4\frac{1}{4} \times 7\frac{1}{2}$  in., pp. v + 162. Price 75 cents. A. S. Barnes & Co., New York.
- NEWCOMER: A Practical Course in English Composition. By Alphonso G. Newcomer, Assistant Professor of English in the Leland Stanford Junior University. Size  $5 \times 7\frac{1}{2}$  in., pp. x + 249. Ginn & Co., Boston.
- PELTON: Life's Sunbeams and Shadows. Poems and prose with Appendix including Biographical and Historical Notes in Prose. Volume I. By John Cutter Pelton. Introduction by Frank M. Pixley. Size  $6 \times 9\frac{1}{4}$  in., pp. 260. J. C. Pelton, San Francisco.
- SWEET: A Primer of Historical English Grammar. By Henry Sweet, M.A., Ph.D., LL.D. Size  $4 \times 6\frac{1}{4}$  in., pp. viii + 112. Macmillan & Co., New York.

## GREEK AND LATIN LANGUAGES AND LITERATURES.

**HARPER & CASTLE:** Exercises in Greek Prose Composition based on Xenophon's Anabasis, Books I-IV. Together with Inductive studies in the uses of the Greek Modes, based on Xenophon's Anabasis, Book IV. By William R. Harper, Ph.D., LL.D., President of the University of Chicago, and Clarence F. Castle, Ph.D., Assistant Professor of Greek in the University of Chicago. Size 5x7½ in., pp. 127. Price 75 cents. American Book Co., New York.

**HARVARD:** Harvard Studies in Classical Philology. Edited by a committee of the Classical Instructors of Harvard University. Volume IV. Size 6x9 in., pp. 216. Price \$1.50. Ginn & Co., Boston.

**MERRILL:** Catullus. Edited by Elmer Truesdell Merrill, Rich Professor of Latin in Wesleyan University. Size 4¼x7¼ in., pp. xlix+273. Ginn & Co., Boston.

**SYMONDS:** Studies of the Greek Poets. by John Addington Symonds. In two volumes, third edition. Size of each volume 3¼x5½ in., pp. xv+585. Price \$6.00. Macmillan & Co., New York.

## MODERN LANGUAGES.

**LYON:** Heath's Modern Language Series. Le Petit Tailleur Bouton, par M. Genin. Edited with Notes, Vocabulary, and appendixes by W. S. Lyon, M.A. Size 4¼x7¼ in., pp. 78+xii. Price 25 cents. D. C. Heath & Co., Boston.

**NICHOLS:** Die Erhebung Europas gegen Napoleon I, von Heinrich von Sybel. Edited with notes by A. B. Nichols, Instructor in German in Harvard University. Size 5x7½ in., pp. x+128. Ginn & Co., Boston.

## HISTORY AND CIVICS.

**BENTLEY:** The Condition of the Western Farmer, as Illustrated by the Economic History of a Nebraska Township. By Arthur F. Bentley, A.B., Johns Hopkins University. Johns Hopkins Press, Baltimore, Md.

**BRYCE:** The American Commonwealth. By James Bryce. In two volumes. Vol. I, The National Government—The State Governments. Third edition, completely revised throughout. Size 5½x8½ in., pp. 724. Price \$1.75. Macmillan & Co., New York.

**SWINTON:** A School History of the United States. By William Swinton. Being a revision and rewriting of Swinton's "Condensed school History of the United States." Size 5x7½ in., pp. 393. Price 90 cents. American Book Co., New York.

**WEEKS:** Church and State in North Carolina. By Stephen Beauregard Weeks, Ph.D., Professor of History and Political Science, Trinity College, North Carolina. Johns Hopkins Press, Baltimore, Md.

## MATHEMATICS.

**HANUS:** Geometry in the Grammar School. An Essay; together with Illustrative Class Exercises, and an outline of the work for the last three years of the Grammar School. By Paul H. Hanus, Assistant Professor of the History and Art of Teaching, Harvard University. Size 4¼x7 in., pp. 52. D. C. Heath & Co., Boston.

**PECK:** Advanced Arithmetic. Inductive Business Course extending over a period of four years of graded school work, with a suggestive outline for teachers. By Wm. M. Peck. Size 5x7½ in., pp. ix+249. A. Lovell & Co., New York.

**TAYLOR:** An Academic Algebra. By James M. Taylor, LL.D., Professor of Mathematics in Colgate University. Size 4¼x6¼ in., pp. x+338. Introductory price \$1. Allyn & Bacon, Boston.

**THOMAS:** Enunciations in Arithmetic, Algebra, Euclid, and Trigonometry, with a few Examples and Notes. By P. A. Thomas, B.A., late of King's College, Cambridge; Assistant Master at Sedbergh School. Size 4¼x6¼ in., pp. viii+84. Macmillan & Co., New York.

## SCIENCE.

**ALLEN:** A List of the Plants Contained in the Sixth Edition of Gray's Manual of Botany of the Northern United States, Including the District East of the One Hundredth Meridian and North of North Carolina, Tennessee, and Arkansas. Compiled by John Allen. pp. 130. Harvard University.

**BOTTONE:** Electricity and Magnetism; A Popular Introduction. By S. R. Bottone, late of the Collegio del Carmine, Turin. Size 5x7 in., pp. xii+203. Macmillan & Co., New York.

**COLORADO COLLEGE STUDIES:** Fourth Annual Publication. Papers read before the Colorado College Scientific Society. Colorado Springs, Colorado, 1893.

**GELDARD:** Statics and Dynamics. By C. Geldard, M.A., formerly Scholar of Trinity College, Cambridge; Mathematical Lecturer under the Non-Collegiate Students' Board, Cambridge. Size 5x7½ in., pp. xii+308. Longmans, Green & Co., New York.

**HAWKINS and WALLIS:** The Dynamo. Its Theory, Design, and Manufacture. By C. C. Hawkins, M.A., and F. Wallis, A., with one hundred and ninety illustrations. Size 5x7½ in., pp. xiv+320. Macmillan & Co., New York.

**JUNKES-BROWNE:** *Geology. An Elementary Handbook.* By A. J. Junkes-Browne, F.G.S., Member of the Geological Survey. Size 5x7 in., pp. 248. Macmillan & Co., New York.

**NEWELL:** *A Reader in Botany. Part II. Flower and Fruit.* Selected and Adapted from well known Authors. By Jane H. Newell. Size 5x7½ in., pp. vi+179. Ginn & Co., Boston.

**SWEENEY:** *Natural Science Note Book. No. 1. Mineralogy.* By W. S. Sweeney, A.M. Revised and enlarged. Size 6½x8½ in., pp. 67. A. Lovell & Co., New York.

#### GEOGRAPHY.

**DAVIS:** *Geographical Illustrations. Suggestions for Teaching Physical Geography Based on the Physical Features of Southern New England.* By William Morris Davis, Professor of Physical Geography in Harvard University. pp. 46. Harvard University.

**KELLOGG:** *Geography by Objective Methods. Geography by Map Drawing. The Construction of Political and Natural Geographical Forms on the Blackboard, in Sand, Paper, and in Clay.* By Amos M. Kellogg, A.M., Editor of *The School Journal* and *The Teachers' Institute*. E. L. Kellogg & Co., New York.

#### ART INDUSTRIAL.

**HAPGOOD:** *School Needlework. A Course of Study in Sewing, designed for use in Schools.* By Olive C. Hapgood. Teacher of Sewing in Boston Public Schools. Size 5x7½ in., pp. 162. Ginn & Co., Boston.

**HUTCHINSON:** *Some Hints on Learning to Draw.* By G. W. Caldwell Hutchinson, Art Master, Clifton College; with illustrations by Sir F. Leighton and others. Size 6½x10 in., pp. xiii+199. Price \$2.25. Macmillan & Co., New York.

**JACOBS and BOWER:** *The Graphic System of Object Drawing.* Arranged by Hobart B. Jacobs and Augusta L. Bower. Size 9x11¼ in., pp. 24. A. Lovell & Co., New York.

*Hand-Book to accompany The Graphic System of Object Drawing.* Arranged by Hobart B. Jacobs and Augusta L. Bower, Teachers of Drawing, New York City. Size 5x7½ in., pp. 111. A. Lovell & Co., New York.

**ROSEVEAR:** *A Text-Book of Needlework, Knitting, and Cutting Out, with Methods of Teaching.* By Elizabeth Rosevear, Senior Teacher and Lecturer on Needlework at the Training College, Stockwell, London, S. W. With original illustrations and sectional diagrams. Size 5x7½ in., pp. xvi+460. Macmillan & Co., New York.

**UPHAM:** *Fifty Lessons in Wood Working.* By Arthur A. Upham, Professor of Natural Sciences, State Normal School, Whitewater, Wis. Size 4½x6½ in., pp. 99. E. L. Kellogg & Co., New York.

#### MUSIC.

**KELLOGG:** *Best Primary Songs.* Compiled and arranged by Amos M. Kellogg, Editor of *The School Journal* and *The Teachers' Institute*. Size 5½x7 in., pp. 53. E. L. Kellogg & Co., New York.

**LAWRENCE and BLACKMAN:** *The Riverside Song Book, containing Classical American Poems set to Standard Music.* Selected and arranged by W. M. Lawrence, Principal of the Mark Sheridan School, Chicago, and O. Blackman, Supervisor of Vocal Music in the Public Schools of Chicago. Size 6x8½ in., pp. 174. Houghton, Mifflin & Co., Boston.

**TUFTS:** *The Cecilian Series of Study and Song. Common School Course; Comprising Studies in Tune and Time, with Songs for Practice and Recreation.* Part I, for one voice; Part II, for two voices; Part III, for two Sopranos and Alto, with added notes for Bass. Edited, arranged, and composed by John W. Tufts. Size 6½x8 in., pp. 160. Silver, Burdett & Co., Boston.

#### HYGIENE AND PHYSICAL TRAINING.

**OUTDOORS.** *A Book of Healthful Pleasure.* pp. 77. Pope Manufacturing Co., Boston.

